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ABSTRACT

Public and private higher education share many of the same problems. The private sector, however, is especially vulnerable to certain pressures because tuition is a primary source of its revenue. In this report, several important functional aspects are considered for their bearing on academic purposes or roles: special roles such as church affiliation, academic resources, faculty credentials and characteristics, financial resources), differences in student clientele (academic and socioeconomic background, aspirations, sources of support), and differences in academic character (program emphasis, research orientation, orientation toward students). Throughout, a major purpose has been to point out the aspects of academic character on which public and private institutions differ. Descriptive profiles of eight types of institutions offer a quick summary of important differences. (Author/MSE)

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ELAINE H. EL-KHAWAS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Vol. 2, No. 3
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PUBLIC AND PRIVATE HIGHER EDUCATION:
DIFFERENCES IN ROLE, CHARACTER, AND CLIENTELE

Elaine H. El-Khawas

Policy Analysis Service Reports
Vol. 2, No. 3, December 1976

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FOREWORD

The Policy Analysis Service, created to give the American Council on Education a greater capability for responding to public policy issues related to higher education, has in recent months focused substantial attention on private higher education, its nature, financial conditions, and students. In 1975, the Office of Education contracted with the Council to analyze the condition of private institutions (emphasizing small liberal arts colleges) and to formulate public policy options to help them. The result was a Study of the Private Sector of Higher Education, carried out under USOE Contract 300-75-0375.

The present report was one part of this larger study. Its author, Elaine El-Khawas, is Staff Associate in the Council's Office of Academic Affairs; we would like to thank that Office for enabling PAS to draw on Ms. El-Khawas's expertise and insight. The report was edited by Justine Kingham and prepared for publication by Laura Kent. Paula Knepper and Clay Henderson efficiently processed the enormous mass of data. Storme Smithers provided secretarial support at various stages.

Following submittal of the report to OE, the Policy Analysis Service has continued its efforts on behalf of the private sector, with support from the Lilly Endowment. In May 1976, PAS (along with several other organizations) sponsored a conference bringing together researchers and policymakers to discuss issues and research needs related to private higher education. PAS also prepared and published Recent Research on Private Higher Education: A Compilation (Policy Analysis Service Reports, Vol. 2, No. 2, August 1976), which gives information on recent and ongoing research studies of the private sector. It is our hope that these and future PAS activities in the same area will ultimately benefit both the academic community and those responsible for public policy.

Patricia Smith
Policy Analysis Service

PREFACE

The 1970s represent a time of adversity and adjustment for higher education by any standard of measurement. After a long period of extraordinary growth and expansion, colleges and universities now face disturbing and unprecedented financial problems and must cope with the combined impact of inflation, recession, and energy shortages. Changing student populations, demands for greater accountability, and adjustments to new social mandates are among the pressures that exacerbate the financial concerns.

Public and private higher education share many of the same problems. The private sector, however, is especially vulnerable to certain of these pressures because tuition is a primary source of its revenue (Wynn, 1974). Many recent studies have addressed the problems facing private institutions. Most bear on financial considerations, such as more effective use of resources or proposals for public support (Cheit, 1973; National Council of Independent Colleges and Universities, 1974). Others stress the loss of vital contributions made by private institutions if steps are not taken to assure the economic viability of the private sector (McGrath, 1975).

This report seeks to contribute to a better understanding of the nature of both public and private higher education. Its premise is that, if changes are to be proposed--especially if they are to be framed differently for the public and private sectors--these proposals need to be informed by a better understanding of the actual differences and similarities, both financial and academic, between public and private higher education.

This is not a financial study. The report is designed to augment analyses of financial circumstances by documenting anew the many dimensions of academic style and purpose that characterize the duality of the higher education system as it exists today. It is a diverse and complex system, valuable for those very qualities.

In this report, several important functional aspects of institutions are considered for their bearing on academic purposes or roles that might be emphasized by administrators. Indicators of differing instructional purposes and program emphases, of varying faculty capabilities, attitudes, and teaching roles, and of contrasting student backgrounds, plans, and interests are examined. Throughout, a major purpose has been to point out the aspects of academic character on which public and private institutions differ.

Important variations have been found, especially with regard to the distinctive roles played by public and private institutions. Descriptive profiles of eight types of institutions (see pp. 44-51) offer a quick summary of important differences. Some of the data reaffirm well-known differences. Some clarify points of similarity or distinctiveness that have not been sufficiently recognized. In all, the review presents a diverse picture of the academic character of institutions, reinforcing certain beliefs and, at the same time, correcting some misconceptions.

Elaine H. El-Khawas
Office of Academic Affairs

1. PROCEDURE

This report presents a detailed examination of a wide range of survey data that might serve as indicators of the academic character of institutions. A number of basic institutional characteristics are examined, including location, religious affiliation, and enrollment size, and a summary profile of institutional financial statistics has been prepared. In order to explore the specifically academic character of institutions in greater detail than is usually possible, conventional measures have been supplemented by extensive data taken from several recent surveys of college students and faculty. Faculty and student responses about attitudes and actual behaviors have been presented according to a number of institutional categories so that their responses may act as indirect indicators of the academic style of institutions. Data on the percentage of students or faculty who specialized in certain fields of study, for instance, are taken as measures of an institution's relative emphasis on liberal arts studies or, instead, on practical learning that is directed toward a career occupation.

Data were taken from several research files available at the American Council on Education. General institutional characteristics (section 2) came primarily from the 1972-73 HEGIS data tape. Profiles of entering students (section 3) were developed by use of data on 1974 college freshmen, utilizing the most recent survey file available at the time of this report. Aspects of the academic style and purpose of institutions (section 4) were derived from responses of faculty (and, in some instances, of college seniors) on recent national surveys. Pertinent information about each data file, including the appropriate reference for detailed descriptions of survey methodology, are summarized in Figure 1.

The HEGIS file differs from the student and faculty files in two important ways: It is based on responses from virtually the entire universe of institutions (N = 2,912), and it reports directly on attributes of the institution. The file thus can be used to provide information, for example, on the number or percentage of institutions that received federal funds or that had enrollments of more than 5,000 students in 1972-73. In contrast, the student and faculty files are based on responses to sample surveys that, when aggregated, provide indirect measures describing institutions; for example, the

FIGURE 1: DATA SOURCES UTILIZED FOR INSTITUTIONAL COMPARISONS

Data Files	Use in Report	Basic Reference
1. Freshmen		
1974 UCLA/ACE sample survey of first-time, full-time college freshmen. Weighted statistical estimates based on a sample of 364 institutions.	Section 3: Differences in Student Clientele	The American Freshman: National Norms for Fall 1974. A. W. Astin et al. (Los Angeles: UCLA Graduate School of Education and American Council on Education, 1974).
2. Seniors		
Follow-up survey (summer 1972) of 1968 college freshmen who participated in the Cooperative Institutional Research Program freshman survey. Weighted statistical estimates based on a sample of 358 institutions.	Section 4: Opportunities for Leadership Experience; Overall Evaluation of the College	A Profile of 1968 College Freshmen in 1972. J. T. Royer and J. A. Creager (Washington: American Council on Education, ACE Research Reports, Vol. 10, No. 1, 1976).
3. Faculty		
1972-73 ACE national survey of college faculty. Weighted statistical estimates based on a sample of 301 institutions.	Section 2: Academic Resources Section 4: Program Emphasis; Orientation Toward Students	Teaching Faculty in Academe, 1972-73. A. E. Bayer (Washington: American Council on Education, ACE Research Reports, Vol. 8, No. 2, 1973).
4. Institutional Characteristics		
1972-73 HEGIS data file on financial statistics of all higher education institutions. Data on 2,912 institutions.	Section 2: General Characteristics; Financial Resources	Financial Statistics of Institutions of Higher Education for Fiscal Year Ending 1973 (Washington: DHEW, National Center for Education Statistics, 1973).

number or percentage of faculty who hold tenure or who actively participate in academic advising can suggest aspects of the institution's character. Student and faculty data have been derived from sample surveys and statistically weighted to be representative of the entire universe of college faculty and students. They nevertheless are statistical estimates, based on sample data organized in this report according to a different classification scheme than that originally utilized. They are therefore subject to some error and, particularly for small categories of analysis, should be interpreted with caution. The reader should consult the survey reports for details of weighting procedures.

Institutional Categories

The recently developed Carnegie Classification system[1] was taken as the primary framework for analysis. This classification, now widely available, provides greater differentiation among types of institutions than most previous classification schemes. Religious seminaries and other specialized institutions are distinguished from general liberal arts colleges, for example, and several subcategories of universities are distinguished. Such changes are useful and important improvements over previous grouping, especially the traditional categories of universities, four-year and two-year colleges.

The Carnegie Classification system is particularly appropriate for an examination of the academic character or purposes of institutions, because its categories are largely organized according to different functional roles. In effect, several separate dimensions or educational purposes have been taken into account by the Carnegie system, including: highest degree offered, enrollment size, program complexity and emphasis, and, in one instance, selectivity of admissions for the student body.

The six basic components of the Carnegie Classification scheme used in this report are shown in Figure 2, with definitions and examples of each category.[2] Some represent a combination of categories from the full Carnegie

[1] A Classification of Institutions of Higher Education (1973). A discussion of Carnegie procedures in developing the scheme is found in Irwin and Millett (1973).

[2] No data are shown for public Liberal Arts I and II colleges in any of the tables. Because very few institutions (two and thirty-six institutions, respectively) fall within this category, the sample data do not allow for reliable analysis.

system, combined for present purposes primarily because a small number of institutions fall into certain classifications when the whole is divided according to public and private control. The doctoral category, for example, includes those institutions originally placed in both the research and doctoral categories of the full Carnegie system.

Figure 3 shows the distribution of all institutions and of public and private institutions among the Carnegie categories.[3] Differences in the relative size of certain categories are quite striking. Universities granting doctorates make up a small proportion of all institutions, for instance. The impact of the past decade's growth on the number of two-year institutions is also demonstrated. The figure stresses, too, the sizable number of specialized institutions that exist within the higher education community.

Moreover, the public and private sectors are shown to be quite distinctive in their relative emphasis on certain types of educational activity. The public sector comprises mainly two-year institutions and comprehensive colleges, together accounting for 85 percent of all public institutions (see Table 1). In contrast, the private sector is concentrated among liberal arts and specialized institutions, which together account for 70 percent of all private institutions.

The tendency for a single sector to "dominate" certain types of educational purpose is also reflected in sector differences in the relative share they occupy of each "market." Table 2 shows, for instance, that liberal arts colleges are almost entirely limited to the private sector and that almost nine out of ten specialized institutions are privately controlled. In contrast, approximately only one of three doctoral or comprehensive institutions are private, and only one of five two-year colleges are private.[4]

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[3]The number of institutions in each category differs somewhat from that shown in the Carnegie Commission report; the present analysis is based on 1972-73 data, whereas the Carnegie report was based on a 1970 population of institutions.

[4]Comparison of these data for two-year institutions with earlier figures provides an indication of the amount of change that has taken place over the past decade. Thus, the percentages of two-year colleges that were under public control in 1950, 1960, and 1970, respectively, were: 55 percent, 58 percent, and 73 percent (Andersen, 1974).

FIGURE 2

PROFILE CATEGORIES

Doctoral-Granting Institutions (177 Institutions)

- Includes Research Universities I and II and Doctoral-Granting Universities I and II of the Carnegie Classification.
- Includes all institutions that awarded at least 10 Ph.D.'s in 1969-70.

Examples are:
Claremont Graduate School
Dartmouth College
Johns Hopkins University
Ohio State University
Texas Technical University
University of Nebraska

Comprehensive Universities and Colleges (471 Institutions)

- Combines two subcategories of the Carnegie Classification.
- Includes institutions that offered a liberal arts program and at least one professional or occupational program such as teacher training or nursing.
- All private institutions enrolled at least 1,500 students and all public institutions enrolled at least 1,000 students in 1970.

Examples are:
Arkansas State University
Boston State College
Creighton University
Fairleigh Dickinson University
St. Olaf College
Virginia Military Institute

Liberal Arts I Colleges (143 Institutions)

- Directly from the Carnegie Classification.
- Includes those colleges that scored 5 or above on selectivity (Astin) or were among the 200 leading baccalaureate institutions in terms of numbers of graduates receiving Ph.D.'s at 40 leading doctoral-granting institutions.

Examples are:
Albertus Magnus College
Berea College
Calvin College
D'Youville College
University of California, Santa Cruz
University of the Redlands

Liberal Arts II Colleges (583 Institutions)

- Directly from the Carnegie Classification.
- Includes all other liberal arts colleges that did not meet criteria for inclusion in category I.

Examples are:
Alverno College
Keuka College
Miles College
Our Lady of Angels College
University of Michigan, Dearborn
Whittier College

CONTINUED ...

PROFILE CATEGORIES (CONTINUED)

Two-Year Colleges (1,095 Institutions)

- Directly from the Carnegie Classification.
- Includes colleges offering two-year associate's or other degrees requiring less than four years of study.

Examples are: Bryant-Stratton Commercial School
Fashion Institute of Technology
Gainesville Junior College
Green Mountain College
Maricopa Technical College
Ohio State University, Marion Branch

Specialized Institutions (443 Institutions)

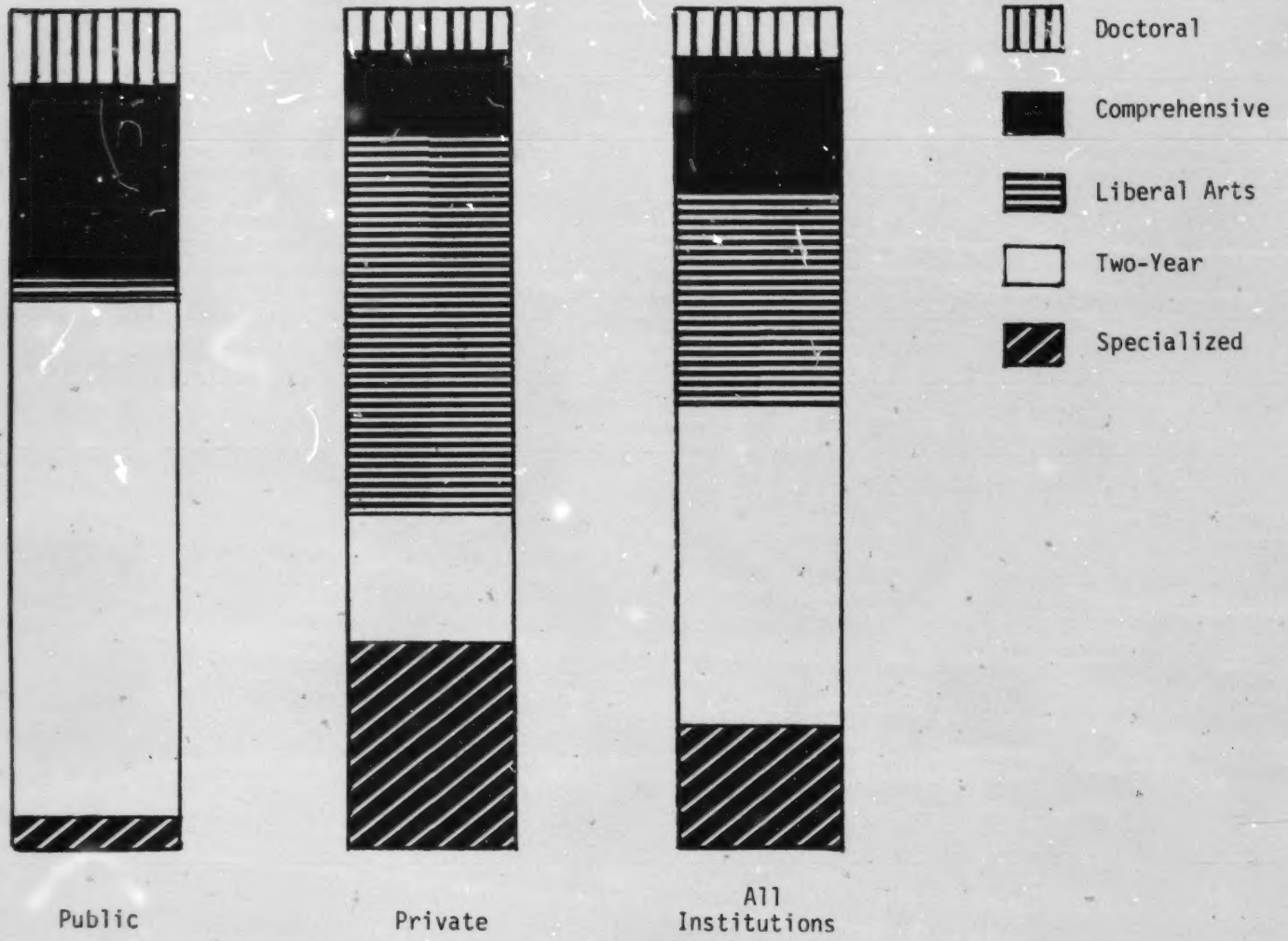
- A combination of nine subcategories.
- Includes 205 theological seminaries, bible colleges, and other institutions offering degrees in religion.

Examples are: Calvary Bible College
Maryknoll College

- Also includes:
  - 44 independent medical schools, e.g., Medical College of Georgia
  - 27 other separate health schools, e.g., Massachusetts College of Pharmacy
  - 45 Schools of Engineering and Technology, e.g., Newark College of Engineering
  - 26 Schools of Business and Management, e.g., Bernard Baruch College
  - 51 Schools of Art, Music, and Design, e.g., Parsons School of Design
  - 11 Schools of Law, e.g., John Marshall School of Law
  - 11 Teachers Colleges, e.g., Bank Street College of Education
  - 23 other specialized institutions, including graduate centers, maritime and military academies, etc., e.g., Nova University.

FIGURE 3

DISTRIBUTION OF INSTITUTIONS BY CARNEGIE CLASSIFICATION



Source: Tabulations from HEGIS data files, 1972-73, American Council on Education.

TABLE 1

DISTRIBUTION OF PUBLIC AND PRIVATE INSTITUTIONS BY CARNEGIE CATEGORIES

	Public Institutions		Private Institutions	
	(Number)	(Percent)	(Number)	(Percent)
Doctoral-Granting Universities	111	8.0	66	4.3
Comprehensive Universities and Colleges	320	23.0	151	9.9
Liberal Arts I Colleges	2	0.1	141	9.3
Liberal Arts II Colleges	36	2.6	547	35.9
Two-Year Institutions	864	62.1	231	15.2
Specialized Institutions	59	4.1	384	25.4
TOTAL	1,392	100.0	1,520	100.0

TABLE 2

PROPORTION OF PUBLIC AND PRIVATE INSTITUTIONS IN EACH INSTITUTIONAL CATEGORY

	Public (Percent)	Private (Percent)
Doctoral-Granting Universities	63	37
Comprehensive Universities and Colleges	68	32
Liberal Arts I Colleges	1	99
Liberal Arts II Colleges	6	94
Two-Year Institutions	79	21
Specialized Institutions	13	87
TOTAL, ALL INSTITUTIONS	48	52

Plan of the Report

For purposes of the report, available information on characteristics of institutions has been assembled and analyzed according to six basic profile categories. Data are presented that offer evidence of institutional differences, by type and control, in terms of: (1) general characteristics, (2) academic and financial resources, (3) clientele, and (4) academic experiences offered. Sections 2, 3, and 4 provide detailed reviews of the data bearing on each topic. General interpretive comments are offered at the beginning of each section, followed by a series of specific item-by-item highlights. All tables referred to in these sections appear in the appendix.

Section 5 is primarily a summary and offers a different approach to the analysis. Individual profiles of each type of institution are presented, based on the distinctive characteristics that have been observed for each type. Some general conclusions that emerge from the analysis of data are also presented.

Throughout, comparisons are made between the public and private sector and between institutional types. The main purposes for presenting them are broad: to identify sector differences and to document important patterns of diversity. Inevitably, too, they offer a multifaceted picture of higher education that contributes to a general understanding of this complex enterprise.

2. DIFFERENCES IN INSTITUTIONAL CHARACTER

Public and private institutions share many roles and purposes, from graduate education to two-year vocational training. Yet, as has been shown, the sectors are distinctive in their relative emphasis. Public institutions are mainly two-year or comprehensive institutions, whereas private institutions are concentrated among liberal arts and specialized institutions.

Several differences in institutional character are reviewed in this section, including the general aspects of size, geographic location, religious affiliation, and broad indicators of an institution's financial status. In addition, the nature of an institution's primary academic resource--its faculty--is reviewed in terms of faculty credentials, rank and tenure, and scholarly involvement.

Most of the data on general and financial characteristics are taken from the 1972-73 HEGIS files.[1] Faculty characteristics are based on responses to a survey of college faculty conducted by the American Council on Education in 1972-73. All data are presented according to Carnegie categories. It should be noted that the financial data, taken from the HEGIS file, are based on responses from the entire population of institutions of higher education ($N \doteq 2,912$). Faculty data, in contrast, represent estimates, based on sample survey responses that have been statistically weighted to approximate the entire population of college faculty. Detailed descriptions of sampling and weighting procedures are found in Bayer (1973).

Tables A-1 to A-3 summarize the characteristics under discussion in this section. Differences are examined in terms of (1) general characteristics, (2) academic resources, and (3) financial resources. On each topic, summary comments about institutional differences precede a series of highlights.

General Characteristics

In this section, two basic indicators of institutional character--enrollment size and geographic location--are reviewed. In addition, institutional identification with a number of special roles is examined. The latter includes single-sex institutions, institutions that are predominantly black, and those that are religiously affiliated.

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[1] The 1972-73 HEGIS survey on financial characteristics of institutions of higher education.

Institutions vary on these characteristics according to both type and control. Data on geographic location, for instance, generally show greater dispersion of public institutions and a definite clustering of private institutions (especially in the Middle Atlantic states)--a reflection of private colleges' having been founded under diverse historical circumstances. Private doctoral and Liberal Arts I institutions had the greatest degree of concentration in the Middle Atlantic region.

The "rural" image sometimes given the private sector relates mainly perhaps to liberal arts colleges or to private two-year colleges. These institutions are more likely than other private institutions to be located outside of metropolitan areas. In general, however, similar or higher proportions of most types of public institutions have rural locations.

Identification with special roles is also found primarily in the private sector. Almost all single-sex institutions are privately controlled, as are religiously affiliated institutions. The latter include private Liberal Arts II colleges for the most part, but a sizable number of religious seminaries and bible colleges are taken into account as well. Historically black institutions--only 3 percent of all institutions--are found within both public and private sectors; most are private Liberal Arts II or public comprehensive colleges.

The data on enrollment size confirm the general view that most private institutions are small. A definite concentration within a small to moderate size range, varying up to about 2,500 students, was evident for private institutions. Public institutions, in contrast, varied more widely in size. Many public institutions are small; about half enroll fewer than 2,500 students. But others range upward in size with 15 percent reporting enrollments of over 10,000 (see Figure 4).

Specific differences are as follows:

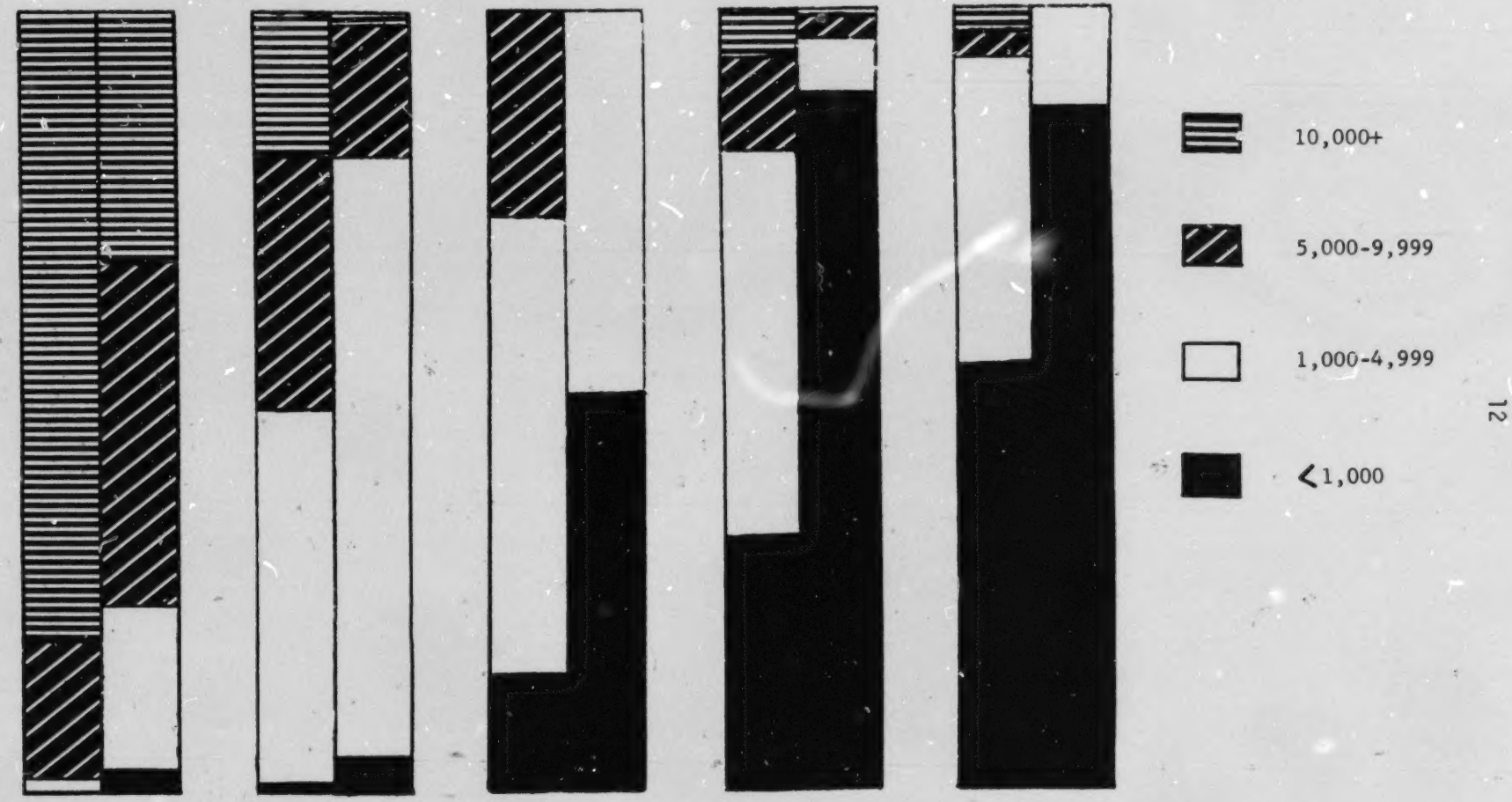
Enrollment Size

a. Public and private institutions vary significantly in enrollment size. Sixty-four percent of private institutions had enrollments (headcount) of fewer than 1,000 students in 1972; only 23.5 percent of public institutions had such low enrollments.[2]

[2] These data bear on considerations of "effective size" of institutions, suggesting that a good many comprehensive, liberal arts, and two-year colleges have smaller enrollments than might be considered effective. Specific comparisons are difficult, however, because the figures reported here are based on total enrollments (headcount) rather than on the full-time equivalent enrollments used in discussions of effective size. See The More Effective Use of Resources (1973).

FIGURE 4

DISTRIBUTION OF PUBLIC AND PRIVATE INSTITUTIONS BY ENROLLMENT SIZE



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b. The majority of private institutions are small, enrolling fewer than 2,500 students. Half of public institutions, however, are of this modest size.

c. The public sector includes a good number of large institutions: 15 percent (203 institutions) had enrollments of over 10,000, and another 17 percent (234 institutions) had enrollments of 5,000 to 10,000 students. In contrast, only twenty-four private institutions (1.6 percent) had enrollments of 10,000 or more, and another fifty-seven (3.7 percent) had enrollments ranging between 5,000 and 10,000 students.

d. Enrollments vary significantly by type of institution. Doctoral institutions typically reported large enrollments, whereas liberal arts colleges and specialized institutions had relatively small enrollments.

e. Within each type, private institutions generally had somewhat smaller enrollments than did public institutions. The largest contrast is with two-year colleges: Public two-year colleges ranged widely in size, with almost one in five reporting 5,000 or more students. Private two-year colleges were uniformly small, with 1,000 or fewer students.

Geographic Distribution

a. As would be expected, public institutions vary widely in location, while private institutions show definite geographical clustering. Private institutions show some concentration in the Middle Atlantic region, for instance. (See Appendix B.)

b. Within the private sector, certain types of institutions show somewhat different geographical distributions. Almost two in five private doctoral and Liberal Arts I institutions are located in Middle Atlantic states. In contrast, fewer private Liberal Arts II colleges (12.6 percent) are found in Middle Atlantic states while a large proportion (27.8 percent) are located in the Southeast.

c. Private institutions also show some concentration in metropolitan locations; only 28.1 percent of private institutions are located outside metropolitan areas, that is, in either rural locations or small cities and towns.[3]

d. Almost half of public institutions are located outside of metropolitan areas.

e. Location varies by type among private institutions. Almost all private doctoral institutions are found in metropolitan areas. In contrast, sizable proportions of private Liberal Arts I and II and private two-year institutions are located outside of metropolitan areas.

Special Roles

a. Predominantly or historically black institutions presently constitute only 3 percent of all higher education, including both public and private institutions. Most are public comprehensive or private Liberal Arts II institutions; a few are private Liberal Arts I colleges.

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[3]That is, outside of Standard Metropolitan Statistical Areas, as defined by the U.S. Census.

Predominantly black institutions thus make up 10 percent, 8 percent, and 4 percent, respectively, of these categories.

b. Single-sex institutions also accounted for a small segment, 9 percent of higher education institutions. Most are found in the private sector. Institutions enrolling only men were mainly public and private specialized institutions or private Liberal Arts I colleges. Men's colleges represented 8.1 percent, 16.6 percent, and 7.1 percent, respectively, of these categories.

c. Institutions enrolling only women appear in three main categories: private Liberal Arts I and II colleges and private two-year colleges. They represented 24.8 percent, 12.6 percent, and 16.5 percent, respectively, of these categories.

d. Religiously affiliated institutions are entirely within the private sector. Recent data show that 16 percent of private institutions were Roman Catholic affiliated, 28 percent were Protestant affiliated.

e. Under the Carnegie Classification, institutions offering religious degrees exclusively and not offering a liberal arts degree are placed in the "specialized" category as religious institutions. This classification thus shows that one-fourth of religiously affiliated institutions were theological seminaries or bible colleges; the others were liberal arts colleges (62 percent) or comprehensive universities or colleges (12 percent).

Academic Resources

Colleges are labor-intensive and heavily reliant on professional personnel. Their primary resources lie in the qualifications and abilities of their faculty. Largely in consequence, most academic personnel policies--including tenure systems, sabbaticals, support for attendance at professional meetings, and strictures that faculty hold doctoral degrees and engage in continuing scholarly endeavors--are designed to establish and maintain high levels of faculty competence.

Institutions vary considerably, however, in the nature of their faculty, both on conventional criteria such as was just mentioned, and on many other characteristics as well. Indeed, as national data on faculty demonstrate, the traditional model of scholarly faculty members actively engaged in research endeavors is closely approximated at only certain types of institutions.

These general points have been reflected in the work of Trow (1975), Lipset and Ladd (1974), and others on the basis of a 1969 study of college faculty (Bayer, 1970). In this report, data from a largely comparable 1972-73 survey are utilized to show differences by type and control of institution in in certain characteristics of the faculty.[4]

[4]The basic results of the 1972-73 faculty survey that provided the data for this section (and for Section 4) were reported in Bayer (1973). All national data cited in this section were taken from the Bayer report.

Faculty Credentials

a. Nationally, only 45 percent of college faculty held a doctorate or equivalent degree in 1972-73. Another tenth reported they were working toward completion of a doctorate degree.

b. Major differences appeared among institutional types, ranging from public and private two-year colleges, where relatively few faculty held the doctorate (9.8 and 14.9 percent, respectively) to public specialized institutions, where 70 percent held the doctorate.

c. The other categories showing higher-than-average proportions of faculty with doctorate degrees included public doctoral (61.1 percent), private Liberal Arts I (55.7 percent), and private doctoral (53.3 percent).

d. Relatively few faculty reported they were working toward completion of their doctoral work. Somewhat higher-than-average proportions reported such status at comprehensive and Liberal Arts II institutions.

Rank and Tenure Status

a. Nationally, about 50 percent of faculty held appointments as associate or full professors in 1972-73. Another 25 percent were assistant professors. Variation across institutions largely reflects differences in type rather than differences in control.

b. Relatively few faculty at two-year colleges held any professorial rank. In contrast, 85 percent or more had such appointments at private specialized (91 percent), public doctoral (87.7 percent), public comprehensive (87.5 percent), and public specialized (85.1 percent) institutions.

c. Nationally, 65 percent of faculty held tenured appointments in 1972-73. The proportion was higher at public institutions (71.6 percent) than at private institutions (56.1 percent), a difference found consistently across institutional types.

Scholarly Involvement

a. Overall, 83 percent of faculty reported spending some time away from campus in the last year for professional activities. Only four in ten were away for six days or more, however. Differences across institutional categories appeared primarily according to institutional type.

b. A higher proportion of faculty at doctoral institutions (about six in ten) had been away for six or more days for professional activities. Lower proportions were reported at comprehensive and liberal arts institutions (three or four in ten) and two-year colleges (about two in ten).

c. About one-third of faculty reported that they spent nine or more hours per week in research or scholarly writing. Higher-than-average proportions were found primarily among public and private doctoral institutions (50.1 and 48.6 percent, respectively) and public specialized institutions (60.7 percent). Relatively low proportions were reported at private two-year (6.5 percent), public two-year (7.2 percent), private Liberal Arts II (12.6 percent), private comprehensive (18.8 percent), and private specialized (20.6 percent) institutions.

d. About 45 percent of faculty reported having any publications (articles, books, etc.) in the previous two years. As with other indicators of scholarly involvement, public and private doctoral institutions showed the highest proportions (64.2 and 65.5 percent, respectively). Lower publication rates were reported at other types of institutions.

e. Only one-quarter of faculty have ever taken a sabbatical. Institutional variation was apparent. Higher-than-average proportions at private specialized and Liberal Arts I colleges reported sabbaticals; much lower proportions did so at two-year and public specialized institutions.

f. About one out of three faculty members reported that they had fallen "seriously behind" in their fields of study. This response was given rather uniformly across types of institutions.

Financial Resources

As has been seen, institutions vary in the nature of their academic resources primarily according to type, and much less frequently by sector. Largely the reverse is true with financial resources. Particularly regarding sources of revenues, public and private institutions reported sharply differing financial profiles. Expenditure and student-aid patterns differed, but less markedly.

Within the private sector, some important differences are found by type of institution. Private Liberal Arts II and two-year colleges both reported much lower student charges than might have been expected for private institutions. In fact, three-fourths of private two-year colleges (and 44 percent of private Liberal Arts II colleges) charged less than $1,500 per year in tuition and fees in 1972-73. Tuition dependence (defined here as having 70 percent or more of total educational and general revenues derived solely from tuition and fees) provides another example. Significant reliance on tuition was reported in most categories, but private comprehensive institutions reported a much higher figure than others: Fully 71.6 percent derived 70 percent or more of their 1972-73 educational and general revenues from tuition.

As Figure 5 shows, private comprehensive institutions as a type are experiencing a particularly precarious financial situation: They are highly reliant on tuition and fee revenues, and they also have relatively high student charges. A good many Liberal Arts I colleges apparently are similarly vulnerable. In both categories, many institutions are highly dependent on tuition income, but, because of already high student charges, they must either try to absorb cost increases or risk losing much of their clientele through

tuition increases. Yet their dependence on tuition income means that a minor drop in enrollment levels could have a severe financial impact.

Figure 5 also suggests that some private Liberal Arts II colleges and private two-year colleges are under a different kind of tuition pressure. Tuition levels may not be extremely high, but the clientele of these institutions (see Section 3) includes many students from lower-income families. If such institutions are to continue to serve their present clientele, they are under pressure to resist increases in student charges.

These comparisons of aggregated data on tuition levels and tuition dependence are tentative and would require more detailed analysis for clarification of the experience of particular institutions. They nevertheless suggest the need for further investigation of these and other combinations of financial characteristics.

Review of recent data on revenues shows that federal funds were an important source of student aid revenues for both public and private institutions.[5] State aid was more frequently reported by public institutions, endowment and private funds were more frequently reported by private institutions. Again, however, important differences appear among private institutions: Approximately eight in ten of the doctoral and Liberal Arts I institutions relied on endowment and private gifts as sources of student aid; much lower proportions were reported by other private institutions.

The data, presented in Table A-1, were taken from the 1972-73 HEGIS survey of Financial Statistics of Institutions of Higher Education using the most recent tape available at the time. The tape may be somewhat out of date as the basis for any detailed analysis of the present financial status of higher education. For the descriptive purposes for which data are used here, to characterize broad differences among institutions, they provide useful indicators of important variations.

Specific differences are as follows:

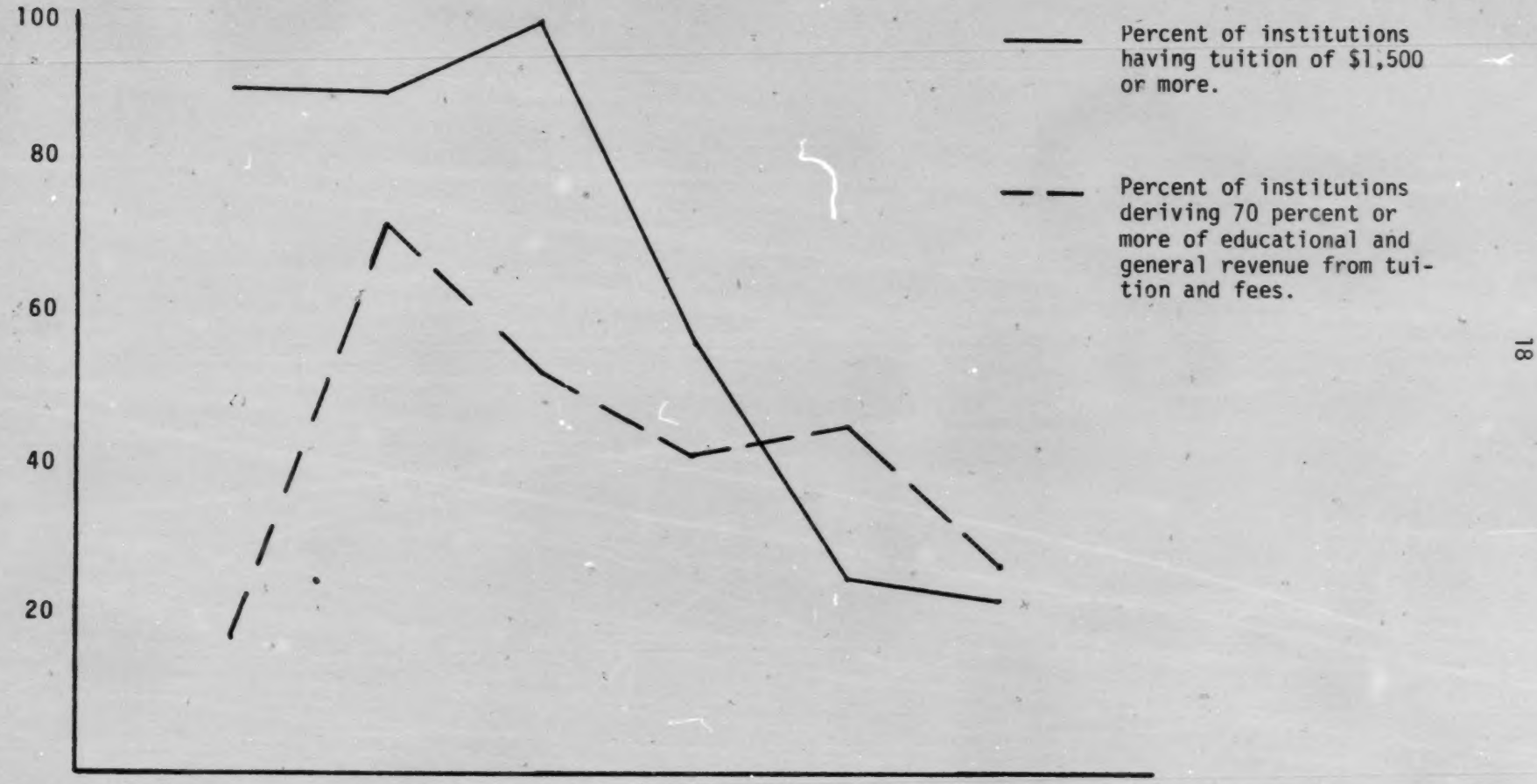
Student Charges

Data on tuition costs, as reported in the HEGIS survey for 1972-73, show that, in addition to sector differences, private institutions varied significantly across categories in their tuition and fees. At doctoral, comprehensive, and Liberal Arts I categories, 90 percent or more of institutions reported tuition costs exceeding $1,500 per year. However, only 56.2 percent of Liberal Arts II colleges

[5]The reader should note, however, that student aid represents only a small proportion of total institutional current fund revenues.

FIGURE 5

COMPARISON OF TUITION LEVELS AND TUITION DEPENDENCE AMONG PRIVATE INSTITUTIONS



charged tuition of $1,500 or more in 1972-73. Only 25.6 percent of private two-year colleges had such charges.

Tuition Dependence

Levels of tuition dependence varied markedly across institutions with sizable differences found among private institutions.[6] In total, 42 percent of private institutions reported high levels of tuition dependence; that is, they derived 70 percent or more of their total educational and general revenues solely from tuition and fees.

Higher-than-average proportions were reported by private comprehensive (71.6 percent), private Liberal Arts I (52.5 percent), and private two-year (45.5 percent) institutions.

Other Revenue Sources

a. State appropriations were the major source of revenue for public institutions. In contrast, only 16.2 percent of private institutions reported any revenue from state sources in 1972-73. Within the private sector, somewhat higher proportions of private doctoral and comprehensive institutions reported receiving state funds.

b. Federal appropriations were reported as a revenue source by about half of public institutions and by fewer (about one-fourth) of private institutions. Highest proportions were reported by public two-year (65.6 percent) and public doctoral (49.5 percent) and lowest proportions by private Liberal Arts I (11.3 percent) and private comprehensive (19.9 percent) institutions.

c. Revenues for sponsored research were reported by about one in five institutions, with little variation by sector. Differences were largely found according to type of institution. Sponsored research revenues were reported by nine out of ten doctoral institutions and by seven in ten public specialized institutions. In contrast, about four in ten comprehensive or private Liberal Arts I colleges reported revenues for sponsored research. Much lower proportions were reported by private two-year (1.7 percent), public two-year (3.9 percent), private Liberal Arts II (11.5 percent), and private specialized (13.1 percent) institutions.

d. Private gifts provided revenue for only one in ten public institutions but for almost nine in ten private institutions. Somewhat fewer private two-year colleges, seven in ten, reported any revenues from private gifts. Among public institutions, more than three in ten doctoral and specialized institutions reported revenues from private gifts.

e. Endowment revenue was reported by 57.1 percent of all private institutions. Much higher proportions were reported by two types: private doctoral and private Liberal Arts I colleges (92.4 and 89.4 percent, respectively). Low proportions of endowment revenues were reported by all categories of public institutions and by private two-year colleges.

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[6] It should be remembered these these data are taken from the 1972-73 HEGIS file. More recent data--showing medians for tuition-and-fee revenues as a percentage of total educational and general revenues per FTE student--are available in Lanier and Andersen (1975) for 1973-74 and 1974-75 (estimates).

Expenditures for Instruction and Departmental Research

a. About half of public institutions, but only one-fourth of private institutions, reported that half or more of their total educational and general expenditures were spent on instruction and departmental research.[7] High proportions were found among public two-year (64.8 percent) and public comprehensive (61.2 percent) institutions.

b. Instruction and departmental research expenditures, calculated on a per-student basis, show that four in ten public institutions, but six in ten private institutions, expended $800 or more per student on instruction. High proportions were found among private Liberal Arts I (92.9 percent), private doctoral (89.4 percent), public doctoral (88.3 percent), and public specialized (88 percent) institutions.

Other Expenditures

a. In general, only one in ten institutions spent more than $100/FTE student on sponsored research. Doctoral institutions, both public and private, were significant exceptions: Three out of four reported this level of research expenditures.

b. Library expenditures of more than $100/FTE student were reported in 1972-73 by 20 percent of public institutions and by 50 percent of private institutions. High proportions were found at private Liberal Arts I (82.3 percent) and private doctoral (77.3 percent) institutions.

c. Expenditures for the institution's physical plant exceeded $200/FTE at 27.5 percent of public institutions and at two-thirds of private institutions. The overall figure for public institutions is somewhat misleading; a very low proportion was reported by public two-year colleges but, in other public categories, higher levels of physical plant expenditures were reported.

d. Among private institutions, 93.6 percent of private Liberal Arts I colleges reported physical plant expenditures of more than $200/student.

Sources of Student Aid

a. In 1972-73, federal funds were the most prevalent source of student aid revenues used by institutions. In almost all institutional categories, seven or eight in ten institutions reported some amount of federal student aid funds. Federal student aid was reported less frequently by two categories of private institutions: private two-year (55.8 percent) and private specialized (34.8 percent).

b. A significant proportion of both public and private institutions derived half or more of their total student aid revenues from federal sources. Such heavy reliance on federal aid was reported by the following proportions of institutions: public comprehensive (57.4 percent), public two-year (55 percent), public doctoral (50.4 percent), public specialized (49.9 percent), and private Liberal Arts II (43.2 percent).

c. State sources of student aid were reported by 50 percent of public doctoral and comprehensive institutions, but by only a third or

[7] More recent data have been reported in Lanier and Andersen (1975).

fewer institutions of other types.[8] Very low proportions citing state student aid were: private specialized (11.2 percent), private two-year (17.7 percent), and private Liberal Arts II (21.4 percent) institutions.

d. Private gifts accounted for some student aid revenues at about half of institutions. High figures, about eight in ten, were found among public and private doctoral institutions and private Liberal Arts I institutions.

e. Endowment served as a source of student-aid revenue at 17 percent of public institutions and at 41 percent of private institutions. Responses varied across private institutions, with eight in ten at doctoral and Liberal Arts I colleges, six in ten at comprehensive institutions, four in ten at Liberal Arts II colleges, and about one in ten at private two-year colleges. Among public institutions, fully six in ten doctoral institutions reported that some amount of student aid revenues came from endowment funds.

Total Student Aid Per Student

a. In general, only a small proportion of institutions reported receiving more than $400/FTE student in student aid revenues. Such amounts were reported almost entirely by a few categories of private institutions.

b. Total student aid expenditures of more than $400/FTE student were reported by one out of five private institutions. For two categories--private doctoral and Liberal Arts I institutions--such student aid levels were reported by 50 percent of institutions.

c. A comparison of the two figures--revenues per student and expenditures per student--reveals a consistent excess in spending. In every category, the proportion with this level of per-student expenditures exceeded per-student revenues. The difference was greatest among private doctoral and private Liberal Arts I institutions. This is an indirect measure, apparently, of the use of general funds by institutions to augment student aid revenues. Another approach to the same problem, a calculation of "student aid deficits," is found in Lanier and Andersen (1975).

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[8] A special survey by ACE's Higher Education Panel (Atelsek and Gomberg, 1975) provides recent data on state and other sources of student aid revenues, although not according to Carnegie categories.

3. DIFFERENCES IN STUDENT CLIENTELE

Differences in institutional character provide one important facet of diversity in higher education; another is based on the multiple purposes, interests, and abilities of college students. Ideally, these two forms of diversity would be complementary: Students with particular needs or interests would be able to attend the institutions best suited to their preference. Some students would choose to attend college at institutions with strong graduate programs, while others would benefit most from the friendly atmosphere and small scale of certain liberal arts colleges; still others would prefer the practical emphasis offered by technical institutes or business schools.

This section reviews a number of differences in the characteristics and educational plans of a recent cohort of freshmen (Tables A-4 and A-5). Parental income and education, intended college majors, long-term degree plans, and high school grades are among the variables reviewed. Other variables focus on ways that college students expect to support the costs of their college education: Likely amounts of financial support expected from several different sources are examined along with data on student levels of concern about college costs, plans to work at an outside job while in college, and the extent of financial independence among freshmen. In almost all instances, data are taken from the ACE/UCLA survey of freshmen entering college for full-time study in the fall of 1974 (Astin et al., 1974).

These data undoubtedly document many well-known patterns of diversity among college students. The primary purpose is to highlight the significant degree to which student populations differ across institutions.

In the following pages, freshman characteristics are discussed according to background characteristics, academic plans and interests, and sources of support for college study. For each a general commentary is followed by specific highlights.

Background Characteristics

The private sector of higher education is conventionally thought to be highly selective and elitist, enrolling motivated, high-achieving students from affluent and privileged family backgrounds. The public sector, in contrast, is thought to be directed in great measure toward lower- to middle-

income students from blue-collar and disadvantaged backgrounds. The data presented in Table A-4 suggest that the actual pattern is not so clear-cut. Four pertinent characteristics are reviewed: average high school grades, family income, race, and educational level of parents. On each, there is considerable variation across institutional type: variation that is larger and more significant than differences by sector.

The "selective" image applies primarily to two institutional types--private doctoral and Liberal Arts I institutions--which, together, make up only 14 percent of the private sector (see Table 1). For other private institutions, much greater heterogeneity of student background can be seen. In fact, the income profiles of two private categories--Liberal Arts II and two-year institutions--are largely similar to those of public two-year colleges and public comprehensive institutions. For all four categories, between 28 and 30 percent of students are from lower-income families, while 23 to 31 percent are from relatively affluent homes. This similarity in the characteristics of students at certain types of public and private colleges was also found by Astin and Lee (1972) in their study of "invisible colleges."

Much the same pattern can be seen with the data on parental education. At public comprehensive colleges and public and private two-year colleges, approximately 50 percent of students reported that neither parent had attended college.

Another characteristic being reviewed--whether students are from the same state in which the institution they are attending is located--documents a notable difference between the public and private sector. The data, taken from a special survey conducted by the National Center for Education Statistics in 1972, apply to all enrolled students and not just to freshmen.[1] They show wide differences between public and private institutions, both as a whole and within particular types of institutions.

Specific differences are as follows:

Home State of Student

a. Data on the home state of students relative to the state in which they attend college, taken from a special survey file on residence and migration patterns of college students, show marked variation between public and private sectors. In 1972, more than 90 percent of public institutions reported that the great majority of their students (70 percent or more) resided within the same state as the

[1] Data have been tabulated from the tape files of a survey on "Residence and Migration of College Students, 1972," which was conducted by the National Center for Education Statistics, U.S. Office of Education.

institution. In contrast, only 43.1 percent of private institutions reported such a predominance of students from within the same state.

b. Compared by category, institutions range widely on this characteristic. Categories with the highest proportions of institutions reporting that 70 percent or more of students were from within the same state included public comprehensive (97.2 percent), public two-year (90.5 percent), and public doctoral (88.2 percent) institutions.

c. Categories in which relatively few institutions had such high proportions of students from within the same state included private Liberal Arts I (21.9 percent), private doctoral (31.8 percent), and private specialized (34.2 percent) institutions.

Urban/Rural Origins

a. Data from a national survey of 1968 freshmen provide some evidence on the type of setting in which students were reared. National data show that about four out of ten freshmen grew up in large cities or their suburbs, about one-third grew up in moderate-sized towns or cities, and about one-fourth grew up in small towns or on a farm.

b. Only certain categories of public and private institutions differed on this characteristic of their student populations. Thus, among doctoral and comprehensive institutions, private institutions had a somewhat greater proportion of freshmen from large metropolitan areas (large cities or their suburbs) and a smaller proportion from rural backgrounds.

c. Compared according to type, it can be seen that private doctoral and private Liberal Arts I institutions reported the highest proportions of students from metropolitan areas. Two-year colleges (public and private), public comprehensive, and private Liberal Arts II institutions reported the lowest percentages of students from such large urban backgrounds.

High School Grades

a. Nationally, 38 percent of 1974 freshmen reported high school grade averages of B+ or better.[2] Private institutions reported a higher percentage (49.5 percent) than did public institutions (33.7 percent). A much higher proportion of students reported such averages at two types of institutions: private doctoral (76.1 percent) and private Liberal Arts I (64.7 percent) institutions.

b. In contrast, public and private two-year colleges enrolled students with lower grades, typically B or C averages.

c. For other institutions, responses fell between these two extremes. For public doctoral and private comprehensive institutions about 50 percent of students earned averages of B+ or better.

Parental Income

a. Overall, about one-quarter of 1974 college freshmen reported annual family incomes of less than $10,000. Public-private differences were slight (5 percent).

[2]This figure and all other national figures for freshman are taken from Astin et al. (1974).

b. Institutions with higher-than-average proportions of such students included public two-year (30 percent), private two-year (29.6 percent), public comprehensive (27.9 percent), and private Liberal Arts II (27.6 percent).

c. About 30 percent of freshmen nationally reported family incomes above $20,000 per year. Higher-than-average proportions were reported by private doctoral (55 percent), private Liberal Arts I (49.1 percent), private comprehensive (41.4 percent), and public doctoral (35.3 percent) institutions.

Education Level of Parents

a. About four in ten college freshmen came from families in which neither parent had attended college. The proportion for public institutions was 50.5 percent; for private institutions, the figure was lower, 34.6 percent.

b. Institutions with higher proportions of such "first-generation" students included public specialized (63.9 percent), public two-year (58 percent), private two-year (51 percent), and public comprehensive (49.9 percent).

c. In contrast, only two in ten students had such family backgrounds at private doctoral (23.2 percent) and private Liberal Arts I (22.5 percent) institutions.

Racial Background

a. According to national norms, black students constituted 7.4 percent of all full-time freshmen in 1974. There was no public-private difference on this figure.

b. Institutional categories with higher proportions of black students included private Liberal Arts II (14.4 percent), public comprehensive (13.7 percent), and public specialized (10.1 percent). The first two of these categories include a good number of historically black institutions (see section 2).

c. Lower-than-average proportions appeared for certain institutional categories but, because of the small numbers involved, these estimates cannot be considered definitive.

Sex Composition

a. In general, college student populations display an approximate balance of men and women students, but considerable variation can be seen among institutional types. High proportions of males were reported at public specialized (88.3 percent), private specialized (76.2 percent), private doctoral (58.9 percent), and public two-year (54 percent) institutions. For the first two categories, 8.1 and 16.6 percent of institutions, respectively, admit only men students (see section 2).

b. High proportions of women students were reported at private two-year (60.8 percent), private Liberal Arts II (56 percent), and public comprehensive (54.5 percent) institutions. The first two categories include 16.5 and 12.6 percent of institutions, respectively, that admit women students only (see section 2).

Academic Plans and Interests

In this section, attention is given to four topics: intended living arrangements while enrolled in college; probable major field of study; long-term degree plans; and factors considered important by freshmen in making their eventual career choices (see Table A-5). Apart from the residential versus commuting issue (campus housing or living with parents or relatives being the customary options), the topics cover quite tentative areas of thinking for college freshmen: Most will later change their choice of major; many will not attain the ambitious degree plans they cited as freshmen; and later experiences will undoubtedly influence their eventual choices of career occupations (Astin and Bisconti, 1973).

The data nevertheless provide important indicators of differing student interests and, for purposes of this report, document a number of significant institutional differences. From an institution's perspective, an overall profile of student interests can be very important. Recent indications of declining interest in liberal arts study and increasing interest in law and other professional fields are salient examples. Both changes can and have markedly affected institutional program offerings.

Public and private sectors of higher education are thought to vary considerably on each of the student "choice" factors under review here. The data tend to support that view, but also demonstrate that evidence of "sector" variation can be misleading. Summary figures (for example, all private institutions or all public institutions) typically convey an image of consistent variation throughout the sector. Yet, more often than not, only one or two institutional categories were distinctive on each of these student choice topics and accounted for most of the variation in the aggregated figures.

Regarding living arrangements, for instance, "sector" variation appears quite large, but it is heavily accounted for by a very low proportion of residential students at public two-year colleges. Otherwise, even at private two-year colleges, the great majority of students intended to live on campus during their first year of college. A similar pattern of distinctive types (rather than consistent sector variation) appears for choices of liberal arts fields, for hopes of earning master's or doctoral degrees, and for a strong valuation being placed on "being helpful to others" when choosing a career.

Data on intended choice of major were organized into the three broad categories of liberal arts, sciences, and career fields. In this form, data

provide some insights on possible institutional vulnerability if broad trends of declining interest in liberal arts study were to continue. The category of career fields included agriculture and forestry, business, education, engineering, health professions, and other technical fields. As compared with other baccalaureate-level fields of study, these fields were thought to be career-related; that is, as primarily serving as preparation for a specific career occupation.

With data organized in such a way, the pattern for liberal arts and vocational choices by college freshmen is not as dichotomous as is sometimes assumed. Career-related choices were more often mentioned by freshmen at public institutions than at private institutions, but the overall difference was small: Five in ten freshmen at public institutions cited career fields, while four in ten did so at private institutions. Only two categories of private institutions (doctoral and Liberal Arts I) reported low proportions of career-related majors; both have high proportions of students planning graduate study. For most other institutional types, public or private, roughly half of all students reported probable majors in career-related fields.

Other differences are as follows:

Plans to Live on Campus

a. Nationally, about 50 percent of freshmen expected to live in college housing during their first year of college.

b. Students at public and private institutions differed markedly in this expectation (41.6 versus 79.4 percent, respectively), but most of this differential is accounted for by differences at two-year colleges. Barely one out of ten students enrolled at public two-year colleges expected to live in college housing; in sharp contrast, 70 percent of students at private two-year colleges expected to do so.

c. For other institutions, there was little variation by sector but some variation by type. The highest proportions of residential students were reported by liberal arts colleges (93.7 and 83.8 percent for Liberal Arts I and II colleges, respectively). Slightly lower figures were reported by private doctoral (80.9 percent), public doctoral (76.2 percent), private comprehensive (69.9 percent), and public comprehensive (66.2 percent) institutions.

Probable Fields of Study

a. National figures show that, in 1974, 43 percent of all freshmen expected to major in liberal arts subjects, and another 9 percent chose science majors. Close to half (48 percent) chose a variety of more career-related fields.

b. Overall differences between the public and private sector indicate a greater preference for career fields at public institutions (50.7

percent) than at private institutions (39.4 percent). Conversely, slightly higher proportions chose liberal arts and science majors at private institutions.

c. The sector difference on liberal arts preference is heavily influenced by freshman responses at one institutional type, the private liberal arts colleges. At these institutions, about half of the freshmen indicated liberal arts choices.

d. At most other types of institutions, about four in ten students reported liberal arts majors. This pattern can be seen for two-year colleges, public and private, as well as for doctoral and comprehensive institutions.

e. An exception is found with "specialized" institutions, where students are enrolled almost exclusively for career-oriented study. The small proportion reported in the liberal arts category at these institutions may actually reflect concentration in arts or religion.

f. Interest in science fields was strongest at private doctoral (22.5 percent), private Liberal Arts I (22.1 percent), private comprehensive (15.7 percent), and public doctoral (12.4 percent) institutions.

g. The highest proportion of career-related choices appeared at specialized institutions. Next, in order, were two-year colleges, both public and private, where more than five in ten students chose career fields. Close to half of all students chose such fields at the following institutions: public comprehensive (53.8 percent), public doctoral (48.3 percent), private comprehensive (46.6 percent), and private Liberal Arts II (42.5 percent). Low proportions were reported at only two types of institutions: private doctoral (33.6 percent) and private Liberal Arts I (23.4 percent).

Long-Term Degree Plans

a. Overall, 12 percent of 1974 college freshmen hoped to earn professional degrees (7.5 percent in medicine and 4.4 percent in law). Another 36 percent hoped to complete other graduate degrees (27.1 percent on the master's level and 8.5 percent on the doctoral level).

b. Public and private institutions differed rather consistently on professional degree plans, both on the whole (9.7 versus 19.4 percent, respectively) and across institutional types. Very high proportions were reported at private doctoral (33.9 percent), private Liberal Arts I (27 percent), and private comprehensive (19.7 percent) institutions.

c. Plans to earn master's or doctoral degrees varied relatively little across institutional types. Except for two-year colleges (where about one-fourth hoped to earn graduate degrees), most institutions reported that four in ten freshmen cited long-term plans for completing master's or doctoral study.

Factors in Long-Term Career Choice

a. Nationally, about six out of ten college freshmen reported in 1974 that "being helpful to others" was a very important factor in their choice of career. Just under half considered another altruistic

goal--making a contribution to society--to be a very important decision factor. On both, a public-private difference was evident: Somewhat higher proportions of students at private institutions chose these goals.

b. Regarding "helpfulness to others," most variation is accounted for by two types of institutions. Private Liberal Arts II colleges showed the highest proportion of students considering this an important factor (72.3 percent); many of these institutions are religiously affiliated. Public specialized institutions showed a very low figure, 39.8 percent. For most other institutional types, public and private, about six out of ten students ranked this as a very important factor.

c. "Making a contribution to society" was considered important by about one-third of freshmen at public two-year (39.4 percent), private specialized (36.4 percent), and public specialized (34.3 percent) institutions. Higher-than-average proportions chose this factor at several types of private institutions, including private doctoral (58.4 percent), private Liberal Arts II (58.4 percent), and private Liberal Arts I (56.5 percent).

d. Another possible factor--the chance to work with ideas--was chosen nationally by 44.1 percent of college freshmen, with only slight overall public-private differences (42.8 versus 48 percent, respectively). Students at two-year colleges, public and private, were less likely to choose this factor, whereas students at private doctoral and Liberal Arts I colleges were more likely to consider it important in career choice.

e. The availability of job openings was rated as a very important factor in career choice by close to half of all college freshmen (46.8 percent) in fall 1974. Overall differences between public and private institutions were small (48.1 versus 42.3 percent, respectively).

f. Lower-than-average proportions reported this goal at two types of private institutions: private liberal arts I (33.7 percent) and private doctoral (38.9 percent). Except for public specialized institutions (with a higher proportion, 55.1 percent), other institutional types reported a figure closer to the overall average.

Sources of Support for College Study

This part reviews some data on student financial arrangements, as reported by entering college freshmen in 1974. The extent of their financial independence, concern about financing college, and expectations about part-time employment are examined. Likely student reliance on a number of potential sources of financial support, including private, state, and federal assistance, is also reviewed.

Certain differences between students at public and private institutions are documented in Table A-5. Public institutions, particularly public two-year colleges, enrolled a greater proportion of financially independent students and students who expected to be working part-time while enrolled. At

private institutions, somewhat larger percentages of students reported private scholarship support and plans to rely on family financial assistance.

The similarities across types of institutions seem to outweigh any differences. Most students expected to work part time while in college, and most expressed some concern about their ability to finance their college education. Only small proportions of students at any type of institution received financial assistance in the form of private scholarships, Basic Educational Opportunity Grants, College Work-Study aid, or state scholarships and grants.

Specific responses are highlighted below:

Financial Independence

a. Nationally, 18.2 percent of full-time college freshmen reported that they were financially independent of their parents in fall 1974. Financial independence was more frequently reported by students at public institutions (19.1 percent) than at private institutions (11.7 percent). This difference was consistent across varying types of institutions.

b. The lowest proportions of financial independence were found at institutions with relatively affluent students (see p. 25). These included private doctoral (6.1 percent), private Liberal Arts I (9 percent), and private comprehensive (9.9 percent) institutions.

c. Public two-year colleges showed a higher-than-average proportion, with 25 percent of students reporting financial independence.

Expectations About Working While in College

a. Overall, about two-thirds of 1974 freshmen expected to hold a job while they were enrolled in college. At public institutions, seven in ten entering students held this expectation; at private institutions, six in ten expected to work.

b. At public two-year colleges, fully 76 percent of freshmen expected to work while enrolled. This high figure accounts for much of the overall difference between sectors. Quite small public-private differences appear for other institutional types.

Concern About Financing College

a. Nationally, 61 percent of 1974 freshmen expressed at least some concern about their ability to finance their college education. Responses did not vary significantly by type of institution.

b. A minor exception was a slightly decreased proportion, 58.7 percent, reported by freshmen at public two-year colleges; three-quarters of these students had expected to work while in college.

Support from Family or Own Employment

a. Most freshmen (80.4 percent) expected some financial help from their parents or family in meeting college expenses. Students at private institutions more often reported this expectation, and in larger

dollar amounts, than did students at public institutions. Overall, 70.3 percent of students at private colleges expected family assistance of $500 or more to meet first-year college expenses. The comparable figure for public institutions was 46.2 percent.

b. Institutions where the highest proportion of students expected $500 or more from their families included private doctoral (81.1 percent), private Liberal Arts I (78.2 percent), and private comprehensive (71.5 percent). Students at public two-year colleges reported the lowest level of family aid: Only 30.3 percent expected to receive $500 or more from their families during the first year.

c. Seventy percent of college freshmen expected to earn money toward college expenses from part-time employment. One-fourth expected to earn more than $500 for their first-year expenses in this manner. Notable here, and paralleling the evidence in part-time work expectations (see p. 30), the data show little variation across types of institutions. The primary difference is a greater expectation of earning $500 or more voiced by students at private doctoral and private comprehensive institutions.

Support from Private Scholarships

a. Nationally, only 19.7 percent of college freshmen held privately or locally sponsored scholarships during fall 1974. Students at private institutions were consistently more likely to hold such scholarships (16.2 percent for public institutions, 32.8 percent for private institutions). A similar differential appears within each institutional type.

b. Most private scholarships were apparently small in size. Only 8 percent of students expected as much as $500 toward first-year expenses from private or local scholarships. Somewhat higher proportions were reported by private doctoral (25.5 percent), private Liberal Arts II (20.7 percent), private Liberal Arts I (20 percent), and private comprehensive (19 percent) institutions.

Support from State Scholarships or Grants

a. Among 1974 college freshmen, 18.9 percent received some amount of direct financial assistance from state grants or scholarships. A small difference appears between public and private institutions: While 16.8 percent at public institutions received such aid, 26.7 percent reported such aid at private institutions.

b. State support was expected to account for $500 or more of first-year college expenses by 19.7 percent of private college freshmen. Fewer public college freshmen--5.6 percent--expected this amount of state aid. The same pattern appears within institutional types.

Support from Basic Educational Opportunity Grants

a. Nationally, 25 percent of college freshmen said they received Basic Educational Opportunity Grants in 1974. A slightly smaller percentage reported grants at public institutions (23.6 percent) than at private institutions (30.5 percent).

b. Public-private differentials generally do not appear within institutional types, however. The only exceptions are two-year colleges

(where a high proportion, 36.3 percent, of private two-year college students reported BEOG's) and specialized institutions (where a low proportion, 13.1 percent, reported BEOG's at public specialized institutions).

c. The institutions reporting the highest levels of BEOG awards included private Liberal Arts II (38.5 percent), private two-year (36.3 percent), private comprehensive (27.6 percent), and public comprehensive (26.8 percent).

Support from College Work-Study

a. Nationally, only 12.5 percent of college freshmen expected that the College Work-Study program would be a source of financial support for their first year of college study. At public institutions, only 10 percent expected such support; the comparable figure at private institutions was 21 percent.

b. Several types of private institutions reported slightly higher-than-average proportions of students expecting Work-Study assistance. They included private Liberal Arts II (27.6 percent), private Liberal Arts I (26 percent), and private two-year (23.8 percent).

4. DIFFERENCES IN ACADEMIC CHARACTER

Institutions of higher education differ tremendously in the nature of their students and faculty, and in the financial resources they devote to their educational programs. They differ in many other ways, too, and particularly in terms of their academic "environment" or climate. Pace, Stern, Astin, and others have contributed greatly to an understanding of the significant variations that exist among institutions in the type of social and intellectual setting they provide for students.

This section provides an exploration of several potential sources of diversity in the academic character of public and private institutions. Relatively little attention has been given to data on student perceptions of college in view of the substantial body of valuable research evidence already available on that subject (Feldman and Newcomb, 1969). Rather, an attempt was made to explore other indicators, especially certain attributes of college faculty members who presumably have direct influence on the academic program and style of each institution (Bayer, 1975). This approach may yield a better understanding of the specifically academic character of institutions that would supplement what is already known about peer environments.

Most of the data for the analysis are based on the national survey of college faculty conducted by the American Council on Education in 1972-73 (Bayer, 1973). A variety of information provided by faculty members is examined, including relative faculty emphasis on certain teaching fields or on graduate students, concern for the personal development of students, vocational or research orientation, and modes of student-faculty interaction. Many other topics might also have been included. Those that have been chosen nevertheless document important differences among institutions on several dimensions of faculty behavior. Indeed, quite distinctive styles of academic life can be observed.

For purposes of this analysis (Table A-6), the survey data on faculty were aggregated for each institution and then summarized according to Carnegie categories.[1] Within each category, differences between faculty at

[1] It should be noted that religious institutions (seminaries and bible colleges) were not included in the faculty survey; thus, the data on private specialized institutions (which in section 3 had included religious schools) are based primarily on technical, business, and professional (medical, health, law) schools in this section.

public institutions and at private institutions are reviewed in some detail. Because all data represent statistical estimates, they must be interpreted with some caution, particularly in small categories.

The faculty data provide the primary source of information on the academic character of institutions. A few additional items of information are taken from student reports about their actual experiences at college. The student reports were provided by a 1972 survey of college seniors or, more precisely, a follow-up survey of the freshman class of 1968. Evaluations of the college experience and reports on leadership experiences are based on the responses given by the 1968 freshmen.

Table A-6 summarizes the data being compared for evidence of diversity in the academic character of institutions. Differences across types of institutions will be discussed according to (1) program emphasis, (2) opportunities for leadership experiences, and (3) orientation toward students. For each, general comments are followed by a series of specific highlights.

Program Emphasis

Several items in the faculty survey provide useful indicators of the nature of the educational programs and academic "climate" of institutions. Institutional types can be distinguished by faculty teaching field, vocational and research goals, current research activity, and time spent on introductory and graduate-level courses.

Differences between the public and private sector are based primarily on vocational and research emphasis; however, distinctiveness among particular types of institutions remains the prime explanatory factor. Thus, two-year and specialized institutions had the greatest vocational emphasis, doctoral institutions reported the most research activity, and Liberal Arts I colleges reported the greatest emphasis on teaching in liberal arts disciplines. As with other data, such difference by type largely account for any so-called sector differences.

At the time of the faculty survey (1972-73), a majority of faculty held teaching appointments in liberal arts fields. Nevertheless, about 75 percent at most types of institutions considered it an important institutional purpose that students be prepared for employment after college.

Views on research purposes of the institution were more diverse. At most types of institutions, only small proportions considered research preparation important. In contrast, greater emphasis on research preparation was

expressed at doctoral institutions. Doctoral institutions were also the most distinctive locus of research funds and had the highest proportion of faculty that were teaching graduate students.

Other differences are as follows:

Teaching Fields

a. Nationally, about half of college faculty held appointments in liberal arts disciplines.[2] One-fifth were in science fields, while 31 percent had teaching fields that were career-related (education, business, etc.). Differences between public and private institutions were small.

b. Several important differences were found according to type of institution. For instance:

   Private Liberal Arts I institutions had the highest proportion of faculty with liberal arts teaching fields (66.5 percent).

   Private specialized institutions had a high proportion of faculty in science fields (30.5 percent) and in career-related fields (50.2 percent).

   Public specialized institutions had very few faculty in science fields (6.7 percent) but a high proportion (61.4 percent) in career fields.

c. Institutions with high proportions of faculty in career fields included public specialized (61.4 percent), private specialized (50.2 percent), public doctoral (37.6 percent), and private doctoral (37.4 percent).

Vocationalism

a. Faculty responses on two possible educational goals--preparing students for employment after college and providing skilled human resources for the local community--document several differences among institutions on vocational emphasis. Nationally, 74.3 percent of faculty agreed that the first goal, preparing students for employment, was very important for their institution. Agreement at public institutions was higher (78.9 percent) than at private institutions (64.8 percent). This sector difference is influenced in part by very high levels of agreement at three types of institutions: public specialized (97 percent), public two-year (89.2 percent), and public comprehensive (79.9 percent). Conversely, there was a very low level of agreement at private Liberal Arts I colleges (41.2 percent). Among other private institutions, levels of agreement were generally quite high: private specialized (91.8 percent), private two-year (75.3 percent), private comprehensive (73.6 percent), and private Liberal Arts II (69.9 percent).

b. The goal of providing skilled human resources for the local community was considered more important at public institutions than at private institutions (68.1 percent versus 53.3 percent, respectively).

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[2] For purposes here, liberal arts included humanities, fine arts, social sciences (including psychology), and a miscellaneous category of "other" fields.

The lowest level of agreement was found at private Liberal Arts I colleges (32.2 percent). Higher-than-average proportions were found at public two-year (86.6 percent), public specialized (75 percent), public comprehensive (65.8 percent), and private two-year (65.5 percent) institutions. In other institutional categories, five or six in ten faculty members considered this an important institutional purpose.

Research Orientation

a. Nationally, 35 percent of college faculty considered it important to develop in students the ability to pursue research. Faculty agreement about this goal was higher at private institutions (40.6 percent) than at public institutions (32.6 percent).

b. Differences by institutional type were important, reflecting higher-than-average agreement in only three categories of institutions: private doctoral (52.9 percent), public doctoral (44.2 percent), and private Liberal Arts I (43.6 percent). For most other types of institutions, only about two or three in ten faculty members supported this goal for their institution.

c. Actual use of research funds tends to be concentrated among doctoral institutions. Nationally, only 12 percent of college faculty reported that they were recipients of federal research funds; figures were higher at doctoral institutions (22 percent) and generally much lower (5 percent or less) at other types of institutions.

d. A largely similar pattern exists with regard to institutional or departmental research funds. Such funds were most often reported at public and private doctoral institutions (18.9 and 13 percent respectively) and much less often at comprehensive, Liberal Arts II, or two-year institutions.

e. Faculty at specialized institutions and private Liberal Arts I colleges were somewhat more likely to have institutional or departmental research funds than federal research funds.

Introductory and Graduate Offerings

a. National figures indicate that nine in ten faculty had responsibilities for undergraduate teaching. There was little or no difference between public and private sectors on this characteristic. Across institutional types, however, slightly lower proportions were reported at doctoral institutions (public and private) and higher proportions at two-year colleges (public and private).

b. Nationally, about three-quarters of faculty reported classroom contact with graduate students. Responses varied considerably on this characteristic. Higher-than-average proportions were reported by public doctoral (89.9 percent), private doctoral (89.4 percent), public specialized (81.9 percent), and public comprehensive (76.7 percent) institutions. Low proportions were reported at two-year colleges and at private specialized (41.2 percent), private Liberal Arts II (31.1 percent), and private Liberal Arts I (30.4 percent) institutions.

Opportunities for Leadership Experience

Data from the 1972 survey of college seniors included student responses about experiences they had while in college.[3] A variety of possible social, academic, and aesthetic activities were covered. Two of these focused on campus leadership experiences: holding student office and serving on a student-faculty committee. Three others--working on a college newspaper or magazine, working on a college political campaign, and joining a fraternity, sorority, or other club--reflect other forms of social participation experiences. Taken together, data on these five experiences reaffirm the view that certain types of institutions provide greater opportunities for formal social involvements than do others (Feldman and Newcomb, 1969).

Nationally, a relatively small proportion of students reported such experiences. Among them, a small but consistent differential appears, with higher responses at private institutions and, most particularly, at private liberal arts colleges.

Specific points of difference are as follows:

Holding Student Office

a. In general, about 15 percent of college seniors had held some student office while in college. Higher figures were reported by most types of private institutions, including private Liberal Arts II (25.7 percent), private Liberal Arts I (25.1 percent), private specialized (24.2 percent), and private two-year (20.6 percent).

b. Lower levels of such participation were reported at public two-year (8.2 percent), public comprehensive (13.8 percent), and public doctoral (13.8 percent) institutions.

Serving on a Student-Faculty Committee

a. At public institutions, 8.9 percent of seniors reported this experience. At private institutions, 16.5 percent gave this response.

b. Higher figures were found primarily among private Liberal Arts I and II colleges (21.2 and 19 percent, respectively).

Working on a School Paper

a. Relatively few seniors reported this experience, 6.2 percent at public institutions, 12.6 percent at private institutions. A small differential exists, with somewhat higher figures reported at private Liberal Arts I and II colleges (14.4 and 15 percent, respectively).

Working in a School Political Campaign

a. Overall, 11.4 percent of seniors at public institutions reported this experience; 16.4 percent did so at private institutions.

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[3]The general report on this follow-up survey is Royer and Creager (1976). All national figures on the survey are available in that report.

b. Higher-than-average figures were reported at two types of private institutions, private doctoral and private Liberal Arts I institutions (20.7 and 23.2 percent, respectively).

Joining a Fraternity, Sorority, or Other Club

a. This experience, a more general form of social participation, was reported by 35 percent of all seniors. There is a small overall difference between public and private institutions (30 versus 39.2 percent, respectively) on this response.

b. Institutions with higher-than-average percentages included private comprehensive (49.6 percent), private specialized (47.8 percent), and private doctoral (42.2 percent). Lower-than-average percentages were found at public two-year (19.8 percent), private two-year (28.3 percent), private Liberal Arts I (28.3 percent), and public specialized (29.8 percent) institutions.

Orientation Toward Students

A variety of indicators, primarily from the faculty survey, have been used in order to highlight facets of an institution's orientation toward students. In a number of college environment studies, this aspect of institutional life as measured by aggregate student perceptions has been associated with several important educational outcomes, including persistence in college and increased learning (Astin and Panos, 1969; Solmon, 1973). The statistical analysis seen in Table A-6 explores the nature of institutional differences on several faculty-based measures of concern for student development. Because undergraduate instruction is such a fundamental role for higher education, comparatively uniform levels of response might have been expected across institutional categories. Indeed, this was the case in a number of instances: Faculty generally favored representation of students on institutional governing boards and supported the use of student evaluations in making faculty promotions. So, too, faculty reported broadly similar patterns of classroom contact and time spent in academic advising of students.

An important pattern of variation can be discerned, however, regarding faculty attitudes toward student development. Faculty at private institutions specifically directed toward undergraduate teaching (primarily liberal arts colleges, but others as well) consistently showed strong interest in the personal development of students. It is at these same types of institutions that higher-than-average proportions of faculty encouraged students to see them outside of class and engaged in social activities with students.

The emphasis on student development marks an important special purpose of private higher education. As noted earlier, most private institutions

fall within the categories that are directly focused on undergraduate instruction.

Specific highlights are summarized below:

Faculty Attitudes Toward Students

a. Nationwide, two-thirds of faculty agreed that students should have representation on institutional governing boards. There was small variation across institutional types. Private Liberal Arts II colleges reported a higher proportion (76.7 percent); public and private specialized institutions showed lower levels of agreement (59.1 and 57.7 percent, respectively).

b. In general, about 70 percent of faculty agreed that formal student evaluations should be a factor in decisions about faculty promotion. Somewhat lower proportions were in agreement at private two-year and private specialized institutions; slightly higher proportions of faculty agreed with this statement at private Liberal Arts I colleges.

Student-Faculty Contact

a. Overall, 60 percent of faculty reported that they were teaching three or more classes each term. Faculty responses varied in this regard not by sector, but by type of institution.

b. The figures were highest at two-year colleges, about 85 percent. Public comprehensive and private Liberal Arts I and II colleges also reported a high proportion of faculty with three or more classes (75 percent, 79.8 percent, and 73.2 percent, respectively). Public and private doctoral institutions reported the lowest proportions of faculty teaching three or more classes (46.7 and 45 percent, respectively).

c. About 25 percent of all faculty nationally reported that they had student teaching assistants. Responses varied considerably across institutional types from very low proportions at public and private two-year colleges (11 and 4.5 percent, respectively) to a high proportion of 42.5 percent at public doctoral institutions.

d. The pattern of variation was similar regarding student research assistants. National figures were about 20 percent; much higher proportions were reported at public doctoral (34.2 percent), private doctoral (28.7 percent), and public specialized (28.9 percent) institutions. Institutions at which very few faculty had student research assistants included public two-year (2.1 percent), private two-year (2.4 percent), private Liberal Arts II (7 percent), and private comprehensive (9.4 percent).

e. Overall, about half of college faculty reported that they spent five or more hours each week in academic advising of students. Except for lower proportions reported at private two-year colleges and public specialized institutions, there was little variation across institutions on this activity.

f. More than three-quarters of faculty reported that they encouraged students to see them outside of class. There was some variation

by type of institution. Higher proportions gave this response at public specialized (94.3 percent), private specialized (87.2 percent), private Liberal Arts I (85.2 percent), private comprehensive (85.2 percent), and private Liberal Arts II (84 percent) institutions. Slightly lower-than-average proportions were reported by public doctoral (73.2 percent) and private doctoral (70.2 percent) institutions.

g. Nationally, 29 percent of faculty reported regular informal contacts with students; that is, spending two or more hours per week in social activities with students. As with other data, some variation appears, largely according to institutional type. Higher proportions were reported at private Liberal Arts II (43.4 percent), private Liberal Arts I (41.1 percent), and private comprehensive (38.6 percent) institutions. Lower-than-average proportions were reported at public doctoral (26.6 percent), private doctoral (26 percent), and private specialized (24 percent) institutions.

Emphasis on Student Development

a. Among a variety of educational goals, faculty nationwide agreed that the following were either "essential" or "very important" goals for their institutions: provide for student's emotional development (36.5 percent), foster deeper levels of student self-understanding (46.1 percent), and develop moral character (39.6 percent).

b. Overall figures showed higher levels of faculty agreement at private institutions (generally about five in ten) than at public institutions (three or four in ten). Public-private differences persisted across all institutional categories.

c. The primary basis for "sector" differences, however, involved low valuation of such developmental goals at doctoral institutions (public and private) and public comprehensive institutions and, conversely, much higher levels of agreement among private two-year and Liberal Arts II institutions.

High levels of agreement for each goal were found as follows:

Emotional Development:	private two-year (65.2 percent) private Liberal Arts II (61.5 percent)
Student Self-Understanding:	private Liberal Arts II (67.5 percent) private two-year (66.1 percent) private Liberal Arts I (62.2 percent)
Moral Character:	private two-year (77.9 percent) private Liberal Arts II (69.7 percent) private comprehensive (55.5 percent)

d. A weaker but broadly similar pattern of variation can be seen on another possible educational goal, development of responsible citizens. Overall, 65 percent of faculty considered this an important goal for their institution. Little or no public-private differences were found, but substantial differences existed between graduate-oriented institutions and those focused on undergraduate instruction. High proportions of agreement were found at private two-year (80.8 percent), private Liberal Arts II (78.5 percent), and public two-year (77.4 percent) institutions.

Student Evaluations of Their College Experiences

a. On the whole, college students express general satisfaction with their college experience: In 1972, about three-quarters of college seniors said they were satisfied or very satisfied with their colleges, with no difference found between public and private sectors. About one-quarter indicated that they were "very satisfied."

b. Within the general pattern, certain higher-than-average proportions can be seen at certain types of institutions in student responses about being "very satisfied." They were private Liberal Arts I (37.6 percent), private specialized (37.1 percent), and public specialized (36.5 percent) institutions.

5. SUMMARY AND CONCLUSIONS

The general premise of diversity in higher education has been amply documented by this review of differences on more than one hundred variables across twelve categories of institutions. Many points of distinctiveness have been highlighted, as have some possibly unexpected aspects of similarity. Further analysis could be undertaken to explore the significance of certain of the findings that have been documented.

Two purposes are intended by this final chapter. First, individual profiles of each type of institution are presented as a means of showing the collective impact on institutional character of the many differences observed for particular topics in sections 2, 3, and 4. The summary profiles underscore a general theme that emerges from this review: that particular types of institutions, even when grouped as broadly as has been done here, show striking evidence of varying emphasis and purpose. Finally, some general conclusions are offered for their possible bearing on considerations of public policy to support and sustain higher education.

Profiles of Each Institutional Type

Review of evidence on institutional style or character has documented that differences in type of institution were often more important for depicting aspects of academic character than were differences in form of control. In this section, a different approach has been adopted in order to show for each category separately the aspects of academic character on which the category appeared to be the most distinctive. Data are organized by their source (institutional, student, or faculty characteristics) and are listed on the profiles only if institutions in the category had in the aggregate been considerably higher or lower than the norm for each characteristic.[1] For the faculty, for instance, the norm (that is, the figure for all faculty combined) on having student teaching assistants was 27 percent. The figure at public doctoral institutions, with 42.5 percent of faculty reporting that they had student teaching assistants, is far above the general norm for faculty.

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[1] Norms for faculty and freshmen data are taken from available reports (Bayer, 1973: Astin et al., 1974). The comparable figures, for all institutions combined, on HEGIS data were taken directly from tabulations of data.

Individual profiles are shown in Figures 6 through 13.[2] Differences among the categories are emphasized quite well by the summary profiles. Differences in financial patterns--particularly with regard to sources of revenues--are quite evident, as are differences in faculty activities and orientations toward their teaching role. As can be seen, too, different types of institutions attract students with differing backgrounds and interests. What is also demonstrated--particularly for those categories on which relatively few characteristics differed from the norm--is that, whatever the particular points of distinctiveness, institutions have many characteristics in common.

Considerations for Public Policy

This review of available evidence on institutional differences in academic character has documented important elements of diversity among institutions of higher education. It also provides a better perspective on the various contributions of both the public and the private sectors to that diversity. Although they share many roles and purposes, the two sectors as a whole are quite distinctive in their relative emphasis. Most public institutions (85 percent of the total) are either two-year colleges or comprehensive colleges and universities. In contrast, private institutions are primarily of two types, liberal arts colleges and specialized institutions, which together constitute 71 percent of the private sector. Because of the often considerable differences among types of institutions--in the nature of their students, faculty, and academic character--each sector offers a significantly different "mix" of educational settings to prospective students.

In short, the sectors are not merely duplicative, but together they offer a greater variety of educational options than is available in one sector alone. Some of this distinctive emphasis may be due to historical circumstance. Other roles, whether by their nature or by practical considerations, may be a trait of a particular sector. The flexibility that many private institutions have to develop special programs, for example, is not as readily available in public higher education. Similarly, the practical demands of sustained expansion and financial support necessary for the existence of large institutions strongly limit the possibility that private institutions would aspire to such a model.

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[2]Profiles were not presented for specialized institutions in view of the heterogeneity of institutions within the category.

FIGURE 6

PROFILE OF PUBLIC DOCTORAL UNIVERSITIES

NUMBER: 111 Institutions
PERCENT OF ALL INSTITUTIONS: 3.8 Percent

	Student Characteristics	Faculty Characteristics	Institutional Characteristics
VERY HIGH[1]	70 percent or more of students from same state Live in campus housing	Hold doctorate or equivalent degree Six or more days away from campus for professional activities Nine or more hours/week in research or scholarly writing Publications in the last two years Have teaching assistants Have research assistants	Enrollment Revenues from: State appropriations Sponsored research Expenditures/FTE for: Instruction and departmental research Sponsored research Libraries Physical plant Student aid revenues from: State funds Private gifts Endowment
HIGH[2]	Expect support of $500 or more from: Parents or family High school grades of B+ or better	Associate or full professor rank Have federal research funds Teach graduate students	Revenues from: Federal appropriations Student aid revenues from: Federal funds
LOW[3]		Lecturer, instructor, or no rank Important for institution to: Provide for emotional development Develop moral character Foster student self-understanding	Location: Middle Atlantic region Revenues from: Private gifts Endowment Student aid expenditures/FTE of more than $400
VERY LOW[4]		Teach three or more different classes	Tuition and fees Tuition dependence

1. At least 15 percent above the norm (i.e., the figure for all institutions).
2. At least 10 percent above the norm.
3. At least 10 percent below the norm.
4. At least 15 percent below the norm.

FIGURE 7

PROFILE OF PRIVATE DOCTORAL UNIVERSITIES

NUMBER: 66 Institutions
PERCENT OF ALL INSTITUTIONS: 2.3 Percent

	Student Characteristics	Faculty Characteristics	Institutional Characteristics
VERY HIGH[1]	Grew up in large city or suburb High school grades of B+ or better Parental income of more than $20,000 Live in campus housing Plan professional degree Expect support of $500 or more from: Parents or family Private scholarships	Nine or more hours/week in research or scholarly writing Publications in the last two years Important for institution to: Develop in students the ability to pursue research	Enrollment Location: Middle Atlantic region Suburb of metropolitan area Nonsectarian Tuition and fees Revenues from: Sponsored research Private gifts Endowment Expenditures/FTE for: Instruction and departmental research Sponsored research Libraries Physical plant Student aid revenues from: Federal funds Private gifts Endowment Student aid expenditures/FTE
HIGH[2]	Science majors Important career factor: Contribute to society Expect any support from: Parents or family Private scholarships Expect support of $500 or more from: State scholarships	Have student research assistants Hold doctorate or equivalent Six or more days away from campus for professional activities Teach graduate students Have federal research funds	
LOW[3]	Parental income of less than $10,000 Financially independent	Important for institution to: Prepare students for employment Develop responsible citizens	Revenues from: Federal appropriations Student aid revenues/FTE
VERY LOW[4]	70 percent or more of students from same state Grew up in small town or on farm Neither parent attended college Career-related majors	Teach three or more different classes	Location: Outside of metropolitan area In Southeast region Revenues from: State appropriations

1. At least 15 percent above the norm (i.e., the figure for all institutions).
2. At least 10 percent above the norm.
3. At least 10 percent below the norm.
4. At least 15 percent below the norm.

FIGURE 8

PROFILE OF PUBLIC COMPREHENSIVE UNIVERSITIES AND COLLEGES

NUMBER: 320 Institutions
PERCENT OF ALL INSTITUTIONS: 11 Percent

	Student Characteristics	Faculty Characteristics	Institutional Characteristics
VERY HIGH[1]	70 percent or more of students from same state Live in campus housing		Enrollment Revenues from: State appropriations Sponsored research Student aid revenues from: Federal funds State funds
HIGH[2]		Teach three or more different classes	Location: Outside of metropolitan area Half or more of student aid revenues from: Federal funds
LOW[3]		Lecturer, instructor, or no rank	Total student aid expenditures/FTE
VERY LOW[4]			Tuition and fees Tuition dependence Revenues from: Private gifts Endowment

1. At least 15 percent above the norm (i.e., the figure for all institutions).
2. At least 10 percent above the norm.
3. At least 10 percent below the norm.
4. At least 15 percent below the norm.

FIGURE 9

PROFILE OF PRIVATE COMPREHENSIVE UNIVERSITIES AND COLLEGES

NUMBER: 151 Institutions
PERCENT OF ALL INSTITUTIONS: 5.1 Percent

	Student Characteristics	Faculty Characteristics	Institutional Characteristics
VERY HIGH[1]	Live in campus housing Expect support of $500 or more from: Parents or family Joined a fraternity, sorority, or other club	Important for institution to: Develop moral character	Enrollment of 2,500-4,999 students Location: Suburb of metropolitan area Religious affiliation Tuition and fees Tuition dependence Revenues from: Sponsored research Private gifts Endowment Student aid revenues from: Endowment
HIGH[2]	Parental income of more than $20,000 Expect support of $500 or more from: Private scholarships State scholarships High school grades of B+ or better	Assistant professor rank Important for institution to: Provide for emotional development Foster student self-understanding	Location: Middle Atlantic region Student aid revenues from: Federal funds Private gifts
LOW[3]	Neither parent attended college	Nine or more hours/week in research or scholarly writing Publications in the last two years	
VERY LOW[4]			Revenues from: State appropriations Federal appropriations

1. At least 15 percent above the norm (i.e., the figure for all institutions).
2. At least 10 percent above the norm.
3. At least 10 percent below the norm.
4. At least 15 percent below the norm.

FIGURE 10

PROFILE OF PRIVATE LIBERAL ARTS I COLLEGES

NUMBER: 141 Institutions
PERCENT OF ALL INSTITUTIONS: 4.8 Percent

	Student Characteristics	Faculty Characteristics	Institutional Characteristics
VERY HIGH[1]	High school grades of B+ or better Parental income of more than $20,000 Live in campus housing Liberal arts majors Plan professional degrees Expect support of $500 or more from: Parents or family	Hold doctorate or equivalent Teach three or more different classes Important for institution to: Foster student self-understanding	Enrollment of 1,000-2,499 Location: Middle Atlantic region Metropolitan area Women's college Religious affiliation Tuition and fees Tuition dependence Revenues from: Sponsored research Private gifts Endowment Expenditures/FTE for: Instruction and departmental research Libraries Physical plant Student aid revenues from: Private gifts Endowment Total student aid expenditures/FTE
HIGH[2]	Seniors very satisfied with college Student office Served on a student-faculty committee Worked in a school political campaign Science majors Plan master's or doctorate Important career factor: Work with ideas Expect support of $500 or more from: State scholarships Private scholarships Expect support from: College Work-Study	Have taken a sabbatical Humanities teaching field Liberal arts teaching field Spend two hours or more each week in social activities with students Important for institution to: Provide for emotional development Develop moral character	
LOW[3]	Important career factor: Availability of job openings Expect to work at outside job while in college		Location: Southeastern region
VERY LOW[4]	Neither parent attended college 70 percent or more of students from same state Career-related majors	Career-related teaching field Teach graduate courses Important for institution to: Prepare students for later employment Provide skilled human resources for local community	Revenues from: State appropriations Federal appropriations Half or more of student aid revenues from: Federal funds

1. At least 15 percent above the norm (i.e., the figure for all institutions).
2. At least 10 percent above the norm.
3. At least 10 percent below the norm.
4. At least 15 percent below the norm.

FIGURE 11

PROFILE OF PRIVATE LIBERAL ARTS II COLLEGES

NUMBER: 547 Institutions
PERCENT OF ALL INSTITUTIONS: 18.8 Percent

	Student Characteristics	Faculty Characteristics	Institutional Characteristics
VERY HIGH[1]	Live in campus housing Expect any support from: Private scholarships College Work-Study	Important for institution to: Provide for emotional development Foster student self-understanding Develop moral character	Enrollment of 500-1,000 students Religious affiliation Tuition and fees Tuition dependence Revenues from: Private gifts Endowment Expenditures/FTE for: Libraries Physical plant
HIGH[2]	Held student office Liberal arts majors Important career factor: Be helpful to others Contribute to society Expect support of $500 or more from: Parents or family Private scholarships State scholarships Basic Opportunity Grants	Agree students should have representation on institutional governing boards Spend two or more hours/week in social activities with students Important for institution to: Develop responsible citizens Rank of assistant professor Humanities teaching field	Expenditures/FTE for instruction and departmental research Student aid revenues from: Endowment Total student aid expenditures/FTE
LOW[3]	Career-related majors	Have student research assistants	
VERY LOW[4]	70 percent or more of students from same state	Nine or more hours/week in research or scholarly writing Publications in the last two years Teach graduate courses	Revenues from: State appropriations

1. At least 15 percent above the norm (i.e., the figure for all institutions).
2. At least 10 percent above the norm.
3. At least 10 percent below the norm.
4. At least 15 percent below the norm.

FIGURE 12

PROFILE OF PUBLIC TWO-YEAR COLLEGES

NUMBER: 864 Institutions
PERCENT OF ALL INSTITUTIONS: 29.7 Percent

	Student Characteristics	Faculty Characteristics	Institutional Characteristics
VERY HIGH[1]	70 percent or more of students from same state	Teach three or more different classes Lecturer, instructor, or no rank Hold tenure Important for institution to: Prepare students for later employment Provide skilled human resources for the local community	Revenues from: State appropriations Federal appropriations
HIGH[2]	Neither parent attended college Expect to work at a job while in college	Important for institution to: Develop responsible citizens	Half or more of student aid revenues from: Federal funds Location: Outside of metropolitan area
LOW[3]	Plan master's or doctorate	Rank of assistant professor Have federal research funds	Student aid revenues from: Private gifts Total student aid expenditures/FTE
VERY LOW[4]	High school grades of B+ or better Live in campus housing Expect support of $500 or more from: Parents or family	Hold doctorate or equivalent Rank of associate, assistant, or full professor Teach graduate courses Have teaching assistants Six or more days away from campus for professional activities Nine or more hours/week in research or scholarly writing Publications in last two years Important for institution to: Develop ability to pursue research	Student aid revenues from: Endowment Expenditures/FTE for: Instruction and departmental research Libraries Physical plant Revenues from: Sponsored research Private gifts Endowment Tuition and fees Tuition dependence

1. At least 15 percent above the norm (i.e., the figure for all institutions).
2. At least 10 percent above the norm.
3. At least 10 percent below the norm.
4. At least 15 percent below the norm.

FIGURE 13

PROFILE OF PRIVATE TWO-YEAR COLLEGES

NUMBER: 231 Institutions
PERCENT OF ALL INSTITUTIONS: 7.9 Percent

	Student Characteristics	Faculty Characteristics	Institutional Characteristics
VERY HIGH[1]	Live in campus housing	Teach three or more different classes Important for institution to: Provide for student's emotional development Foster student self-understanding Develop moral character Develop responsible citizens Lecturer, instructor, or no rank	Enrollment of under 500 Tuition dependence Revenues from: Private gifts
HIGH[2]	Expect any support from: College-Work Study Basic Opportunity Grants Expect support of $500 or more from: State scholarships	Student evaluation should be part of faculty promotion	Women's college
LOW[3]	70 percent or more of students from same state Percentage of male students Expect any support from: Part-time employment	Assistant professor rank Any days away from campus for professional activities Education teaching field Have federal research funds	Student aid revenues from: Federal funds State funds Private gifts
VERY LOW[4]	High school grades of B+ or better	Have teaching assistants Have research assistants Hold doctorate or equivalent degree Associate or full professor rank Hold tenure Six or more days away from campus for professional activities Nine or more hours/week in research or writing Publications in last two years Have taken sabbatical Teach graduate courses	Student aid revenues from: Endowment Expenditures/FTE for: Instruction and departmental research Revenues from: State appropriations Sponsored research

1. At least 15 percent above the norm (i.e., the figure for all institutions).
2. At least 10 percent above the norm.
3. At least 10 percent below the norm.
4. At least 15 percent below the norm.

Differences in institutional approach and purpose are not just of historical interest; they serve important contemporary social purposes as well. Diversity of programs provides a necessary and vital range of educational opportunities that makes it possible for prospective students to choose the particular types of programs or institutions best suited to their individual abilities and interests.

It is in this context that the distinctive contributions of the private sector can be better understood. The privately controlled institutions offer the alternative of small-scale settings, certainly; indeed, almost nine of ten private institutions reported enrollments of fewer than 2,500 students in 1972-73. The option for special-purpose institutions--whether it be religious, value-related, or technical, single-sex or otherwise specialized--is an important factor, too. Above all, the private sector is the primary locus of a particular type of institution, one that focuses almost entirely on a four-year baccalaureate program of undergraduate instruction. Such institutions, particularly the liberal arts colleges, typically have small enrollments, students living in campus housing, and faculty who are concerned about fostering the personal development of students. This type of educational setting, perhaps the stereotypical image of college for many people, is almost exclusively found within the private sector. Fully 95 percent of all liberal arts colleges are privately controlled institutions.

It is important to realize, too, that, as a type, such institutions have represented a declining proportion of higher education institutions in recent decades. In 1950, just less than half of all institutions (43 percent) offered a four-year (or first professional) degree as their highest offering (Andersen, 1975). By 1974, however, only 30 percent of institutions fit this category. The role of the private sector is again significant: In 1974, half of private institutions were of this type, a figure little changed from the comparable proportion of 53 percent reported in 1950. In contrast, only 8 percent of public institutions had such a focus on baccalaureate instruction in 1974, a sharp decrease from a 1950 figure of 25 percent (Andersen, 1975).

Whatever the indicator chosen, it seems clear that, while the traditional baccalaureate-level college provides a distinctive type of educational setting for students, that option is for the most part available with the private sector. This reality, taken in conjunction with other analyses of the financial vulnerability and pressures faced by such private institutions, under-

scores the need for improved efforts to sustain the private sector. If diversity of program offerings is to continue to be available, the private sector--particularly through its distinctive emphasis on a particular type of educational option--has a vital role to play in maintaining that diversity.

TABLE A-1

GENERAL CHARACTERISTICS OF PUBLIC AND PRIVATE INSTITUTIONS

(1972-73 HEGIS Data Files: Percentages of Institutions Reporting Each Characteristic)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Enrollment (headcount.1972)														
Under 500	8.5	38.1	0.0	3.0	0.0	2.0	-	6.4	-	26.5	11.5	71.9	30.5	66.1
500-999	15.0	25.9	0.0	0.0	1.3	2.7	-	28.4	-	41.7	20.9	17.3	23.7	21.1
1000-2499	26.5	24.2	0.0	6.1	17.8	36.4	-	59.6	-	30.7	31.9	8.7	30.5	9.6
2500-4999	18.5	6.5	1.8	15.2	30.0	40.4	-	5.7	-	0.9	17.0	1.7	8.5	2.9
5000-9999	16.8	3.7	17.4	43.9	32.2	16.6	-	0.0	-	0.2	12.5	0.4	3.4	0.3
10000 or more	14.6	1.6	80.7	31.8	18.8	2.0	-	0.0	-	0.0	6.1	0.0	3.4	0.0
Region														
New England	5.8	10.9	5.4	16.7	6.6	9.9	-	15.6	-	8.2	5.0	16.5	10.2	9.1
Middle Atlantic	14.8	23.4	9.0	39.4	15.9	32.5	-	36.2	-	12.6	13.5	19.5	[illegible]	29.7
Great Lakes	15.3	18.2	18.9	10.6	13.1	19.2	-	21.3	-	18.1	16.7	11.7	[illegible]	22.1
Plains	10.5	11.1	10.8	3.0	10.9	5.3	-	6.4	-	16.3	10.6	9.5	6.8	10.2
Southeast	24.9	20.3	21.6	7.6	31.9	13.9	-	11.4	-	27.8	23.5	30.7	13.6	11.5
Southwest	10.1	5.1	12.6	7.6	8.9	8.0	-	0.7	-	6.0	10.0	5.2	20.7	3.7
Rocky Mountains	4.2	1.4	8.1	3.0	4.7	0.7	-	0.7	-	1.8	3.7	1.7	5.1	1.0
Far West	14.3	9.5	13.5	12.1	8.1	10.6	-	7.8	-	9.1	17.0	5.2	10.3	12.5
Metropolitan location*														
Central city of SMSA	19.0	24.4	16.5	22.7	15.2	20.8	-	36.6	-	24.0	21.0	20.8	14.9	24.8
Suburban part of SMSA	33.4	47.5	45.0	72.7	34.8	59.7	-	26.8	-	34.4	28.0	40.0	71.6	61.1
Outside of SMSA	47.5	28.1	38.5	4.5	50.0	19.5	-	36.6	-	41.6	50.9	39.2	13.4	7.1
Race of Institution														
% predominantly black	2.9	3.9	0.0	1.5	10.0	1.3	-	0.0	-	8.0	0.6	3.9	0.0	0.8
Single-Sex Institutions														
% men's colleges	0.5	7.5	0.0	0.0	0.3	3.3	-	7.1	-	4.9	0.1	4.3	8.6	16.6
% women's colleges	0.2	9.7	0.9	0.0	0.6	0.7	-	24.8	-	12.6	0.0	16.5	0.0	1.1
Religious Affiliation*														
Protestant	-	27.8	-	1.5	-	30.5	-	27.5	-	39.2	-	-	-	33.1
Roman Catholic	-	16.3	-	0.0	-	24.7	-	17.6	-	27.8	-	-	-	10.0
Nonsectarian	-	55.9	-	98.5	-	44.8	-	54.9	-	33.0	-	-	-	56.9

*Based on special tabulations provided by Dr. John A. Creager, American Council on Education.
Data were not available on private two-year colleges.

TABLE A-2

ACADEMIC RESOURCES OF PUBLIC AND PRIVATE INSTITUTIONS

(1972-73 ACE Survey of College Faculty: Percentages of Faculty Reporting Each Characteristic)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Faculty Credentials														
% holding doctorate or equivalent degree	45.3	44.4	61.1	53.3	48.3	39.0	-	55.7	-	35.1	9.8	14.9	70.0	29.8
% working on doctoral degree	9.7	13.2	6.6	9.8	16.5	18.2	-	14.1	-	16.5	8.3	8.5	14.7	10.9
Rank and Tenure Status														
% with associate or full professor rank	50.2	51.4	62.2	60.0	56.2	45.4	-	49.1	-	45.8	20.3	17.5	56.4	69.9
% assistant professor	23.7	28.0	25.5	20.4	31.3	38.1	-	31.6	-	36.4	11.9	12.2	28.7	21.1
% with lecturer, instructor or no rank	26.0	20.6	12.3	19.7	12.5	16.5	-	19.3	-	17.7	67.8	70.3	14.9	9.0
% holding tenure	71.6	56.1	68.3	58.0	71.4	58.8	-	56.8	-	57.6	81.4	31.8	54.5	25.1
Scholarly Involvement														
% with any days away from campus for professional activities	83.6	82.2	89.8	84.9	82.9	77.1	-	81.9	-	83.1	74.2	71.4	66.7	83.2
% with 6 or more days away for professional activities	43.7	43.9	59.7	55.6	38.5	37.4	-	34.4	-	35.4	18.7	26.2	32.0	45.6
% with 9 or more hours/week in research or scholarly writing	36.1	30.6	50.1	48.6	30.1	18.8	-	22.7	-	12.6	7.2	6.5	60.7	20.6
% with publications in the last two years	45.7	42.6	64.2	65.5	40.6	28.3	-	36.2	-	21.5	13.2	9.1	52.5	33.6
% that have taken a sabbatical	24.2	25.9	28.6	30.1	26.7	17.8	-	37.2	-	20.1	15.5	9.1	5.8	41.1
% that agree, knowledge in field expanding so that I have fallen seriously behind	33.5	33.7	33.5	31.9	35.2	33.4	-	35.2	-	35.8	32.4	38.0	29.9	32.7

TABLE A-3

FINANCIAL RESOURCES OF PUBLIC AND PRIVATE INSTITUTIONS

(1972-73 HEGIS Data Files: Percentages of Institutions Reporting Each Characteristic)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Tuition costs (1972-73)														
% with tuition and fees of $1500 or more	0.4	50.5	0.0	89.4	0.3	89.0	-	99.9	-	56.2	0.4	25.6	0.0	22.7
Tuition Dependence														
% with more than 70% of total E&G revenues from tuition and fees	0.4	42.4	0.9	18.1	0.0	71.6	-	52.5	-	42.0	0.5	45.5	0.0	27.6
% with 31-70% of total E&G revenues from tuition and fees	12.4	41.4	9.9	48.4	18.4	23.8	-	45.4	-	50.9	10.8	41.1	3.4	33.2
% with 30% or less of total E&G revenues from tuition and fees	87.0	16.4	89.1	33.3	81.5	4.6	-	2.1	-	7.1	88.5	13.4	96.5	39.3
Other Revenue Sources														
% with any amount of E&G revenue from:														
State appropriations	92.3	16.2	94.6	33.3	96.3	27.2	-	23.4	-	12.1	90.9	12.1	91.4	13.9
Federal appropriations	53.8	27.0	49.5	25.8	30.3	19.9	-	11.3	-	35.3	65.6	32.5	31.0	21.4
Sponsored research	22.2	18.9	91.0	90.9	38.4	37.7	-	39.0	-	11.5	3.9	1.7	70.7	13.1
Private gifts	10.9	88.3	37.8	93.9	10.6	92.7	-	97.2	-	95.6	5.9	73.2	31.0	81.3
Endowment	4.2	57.1	20.7	92.4	5.6	70.2	-	89.4	-	58.0	1.0	35.4	10.3	46.0
Expenditures for Instruction														
% with more than 60% of total E&G expenditures for instruction and departmental research	24.2	6.4	6.3	0.0	15.9	4.0	-	2.8	-	3.8	31.4	8.2	10.3	11.5
% with 41-60% of total E&G expenditures for instruct. & dept. res.	58.6	56.1	51.3	48.5	74.4	77.5	-	69.5	-	61.6	54.1	38.1	48.2	47.1
% with 40% or less of total expenditures for instruct. and dept. research	17.2	37.6	42.3	51.5	9.6	18.5	-	27.7	-	34.4	14.4	53.7	41.4	41.4
% with instruct. & dept. res. expenditures of more than $800/FTE	39.8	61.0	88.3	89.4	54.4	52.3	-	92.9	-	63.8	23.9	31.2	88.0	63.1

TABLE A-3

(Concluded)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Other Expenditures														
% with more than $100/FTE for sponsored research	10.1	8.8	72.1	78.8	5.9	6.6	-	13.5	-	2.9	0.1	0.9	65.5	9.1
% with more than $100/FTE in library expenditures	20.3	49.7	51.4	77.3	27.5	26.5	-	82.3	-	51.7	9.0	29.0	65.5	51.3
% with more than $200/FTE for physical plant exps.	27.5	66.6	64.0	81.8	41.2	49.0	-	93.6	-	66.6	13.3	53.3	77.6	70.3
Sources of Student Aid														
% with any student-aid revenues from:														
Federal funds	77.1	60.7	80.2	84.8	87.2	79.5	-	74.5	-	70.0	73.0	55.8	81.0	34.8
State funds	39.3	20.1	49.5	24.2	50.0	30.5	-	31.2	-	21.4	34.0	17.7	32.8	11.2
Private gifts	49.7	58.4	81.1	84.8	53.8	64.9	-	83.0	-	62.7	44.6	39.8	53.4	47.9
Endowment	16.6	40.6	60.4	81.8	20.6	57.6	-	78.7	-	40.0	7.5	13.9	36.2	30.2
% with half or more of total student-aid revenue from federal funds	54.3	33.2	50.4	42.4	57.4	41.0	-	18.4	-	43.2	55.0	38.1	49.9	16.8
Total Student Aid/FTE														
% with total student aid revenues of more than $400/FTE	0.9	11.7	0.0	21.2	0.6	4.6	-	15.6	-	11.1	0.2	7.0	12.0	15.2
% with total student aid expenditures of more than $400/FTE	1.4	22.9	1.8	48.5	0.6	9.3	-	51.0	-	24.1	0.2	9.2	20.6	20.3

TABLE A-4

BACKGROUND CHARACTERISTICS OF STUDENTS AT PUBLIC AND PRIVATE INSTITUTIONS

(1974 UCLA/ACE Freshman Survey: Percentages of Freshmen Reporting Each Characteristic)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Home State of Students*														
% of institutions with 70% or more of students from the same state	91.7	43.1	88.2	31.8	97.2	61.0	-	21.9	-	44.8	90.5	56.3	82.8	34.2
Urban/rural Origins**														
% who grew up in a large city or suburb of city	36.9	42.6	41.0	57.1	34.4	41.3	-	44.7	-	37.5	35.4	35.3	39.1	43.6
% who grew up in a moderate-sized city, town	33.0	32.0	32.7	28.4	30.8	34.7	-	32.0	-	33.5	34.9	34.4	36.1	22.7
% who grew up in a small town or on a farm	30.1	25.4	26.3	14.5	34.9	23.9	-	23.4	-	29.0	29.7	30.3	24.8	33.7
High School Grades														
% with high school grade average of B+ or better	33.7	49.5	51.1	76.1	36.5	51.0	-	64.7	-	39.3	22.9	22.6	48.4	32.6
Parental Income														
% from families with incomes above $20,000	27.2	39.4	35.3	55.0	26.7	41.4	-	49.1	-	30.8	22.7	26.8	26.0	32.9
% from families with incomes below $10,000	26.1	21.0	17.3	11.6	27.9	17.2	-	15.7	-	27.6	30.0	29.6	14.4	20.4
Education of Parents														
% from families in which neither parent attended college	50.5	34.6	36.9	23.2	49.9	36.3	-	22.5	-	39.5	58.0	51.0	63.9	38.0
Race and Sex														
% black	7.5	7.6	3.3	4.7	13.7	3.8	-	4.3	-	14.4	6.8	6.9	10.1	1.1
% male	51.6	50.3	53.1	58.9	45.5	54.2	-	49.4	-	44.0	54.0	39.2	88.3	76.2

*Taken from data file on Residence and Migration of College Students, 1972 (unpublished NCES survey).

**Taken from 1968 freshman survey. See Creager, Astin, Boruch, and Bayer, 1968.

TABLE A-5

ACADEMIC PLANS AND SOURCES OF FINANCIAL SUPPORT OF FRESHMEN AT PUBLIC AND PRIVATE INSTITUTIONS

(1974 UCLA/ACE Freshman Survey: Percentages of Freshmen Reporting Each Characteristic)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Living Arrangements														
% planning to live in campus housing	41.6	79.4	76.2	80.9	66.2	69.9	-	93.7	-	83.8	11.5	70.9	2.6	51.6
Probable Field of Study														
% liberal arts	41.3	46.8	39.3	43.9	36.7	37.7	-	54.5	-	46.1	41.4	41.5	21.3	21.8
% sciences	8.1	13.8	12.4	22.5	9.5	15.7	-	22.1	-	11.4	5.5	5.0	0.0	2.5
% career-related fields	50.7	39.4	48.3	33.6	53.8	46.6	-	23.4	-	42.5	53.1	53.5	78.7	75.8
Long-Term Degree Plans														
% planning professional degrees (medicine, law)	9.7	19.4	15.7	33.9	8.7	19.7	-	27.0	-	13.4	6.6	6.1	1.0	7.0
% planning master's or doctorate degrees	32.6	41.0	36.8	44.4	41.4	39.9	-	47.9	-	40.9	25.5	27.7	63.7	41.4
Factors in Career Choice														
% considering as very important:														
Being helpful to others	60.6	66.5	59.6	64.0	65.4	63.9	-	66.5	-	72.3	59.0	65.3	39.8	51.1
Making a contribution to society	44.5	54.5	49.4	58.4	49.4	52.6	-	56.5	-	58.4	39.4	46.7	34.3	36.4
Chance to work with ideas	42.8	48.0	45.7	53.0	46.0	44.4	-	56.5	-	46.2	39.5	42.3	49.8	38.9
Likelihood of job openings	48.1	42.3	48.4	38.9	49.0	45.5	-	33.7	-	45.6	47.4	46.0	55.1	43.2
Financial Independence														
% financially independent	19.1	11.7	11.8	6.1	14.8	9.9	-	9.0	-	14.7	25.0	18.4	13.6	11.7
Work Expectations														
% expecting to work at an outside job while in college	70.4	60.5	63.6	57.3	66.6	62.8	-	55.5	-	63.6	76.1	58.5	76.6	67.1

TABLE A-5

(Concluded)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Concern about Financing College Education														
% with major concern	14.9	15.6	14.2	13.8	17.7	14.6	-	13.5	-	17.7	14.0	13.9	20.1	22.8
% with some concern	46.8	49.9	49.6	48.0	48.2	50.6	-	51.1	-	50.8	44.7	48.3	42.0	49.4
% with no concern	38.3	34.5	36.2	38.2	34.1	34.7	-	35.5	-	31.5	41.3	37.8	37.9	27.8
Sources of support for First-Year Expenses														
% expecting any support from parents or family	78.8	87.1	85.8	91.3	82.6	86.5	-	91.0	-	84.7	72.9	83.3	76.4	86.1
% expecting $500 or more from parents or family	46.2	70.3	65.4	81.1	55.6	71.5	-	78.2	-	63.4	30.3	60.1	40.6	68.6
% expecting any support from part-time employment	71.0	69.1	74.1	72.2	68.1	69.5	-	74.7	-	65.5	70.7	60.2	77.4	78.4
% expecting $500 or more from part-time employment	25.5	28.5	31.0	34.7	23.9	29.9	-	29.2	-	25.8	23.2	17.7	41.5	39.9
% expecting any support from private scholarships	16.2	32.8	20.3	34.0	16.8	32.7	-	32.9	-	35.6	13.3	25.8	11.0	27.8
% expecting $500 or more from private scholarships	4.5	19.6	7.1	25.5	5.2	19.0	-	20.0	-	20.7	2.6	9.9	8.7	17.0
% expecting any support from state scholarships, grants	16.8	26.7	15.9	26.3	22.2	27.3	-	26.	-	28.4	14.8	26.4	20.7	17.4
% expecting $500 or more from state scholarships	5.6	19.7	7.0	18.8	8.0	19.9	-	20.8	-	20.8	3.6	19.0	16.4	13.3
% expecting any support from Basic Opportunity Grants	23.6	30.5	18.7	19.3	26.8	27.6	-	27.3	-	38.5	25.1	36.3	13.1	23.7
% expecting $500 or more fr. Basic Opportunity Grants	10.6	20.7	9.2	13.9	14.1	17.2	-	19.3	-	27.0	9.7	21.9	6.7	15.7
% expecting any support from College Work Study	10.2	21.0	9.4	11.7	15.5	14.8	-	26.0	-	27.6	8.4	23.8	2.3	8.6
% expecting $500 or more from College Work Study	4.1	9.0	4.9	7.7	5.6	7.1	-	8.9	-	11.4	3.0	8.9	0.0	5.8

TABLE A-6

INDICES OF THE ACADEMIC CHARACTER OF PUBLIC AND PRIVATE INSTITUTIONS

(1972-73 ACE Survey of College Faculty: Percentages of Faculty Reporting Each Characteristic)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Teaching Field														
Business administration	6.0	5.5	3.9	5.4	4.3	9.1	-	1.1	-	4.3	8.0	11.6	36.8	4.9
Biological sciences	8.2	4.9	10.4	6.1	6.0	2.8	-	5.0	-	4.7	6.9	1.6	0.4	6.3
Education	10.3	10.0	9.7	7.1	16.0	12.6	-	11.1	-	14.8	6.2	3.9	9.6	4.0
Engineering	6.9	5.9	10.7	8.3	2.0	5.4	-	0.5	-	0.1	3.9	13.9	8.6	40.3
Fine arts	9.2	9.7	7.9	6.3	13.2	12.3	-	15.5	-	11.9	8.9	8.7	0.0	3.0
Humanities	15.2	22.0	12.7	16.8	17.9	21.9	-	31.5	-	28.0	17.3	24.8	12.3	5.3
Physical sciences	12.2	12.4	11.2	11.4	12.7	13.8	-	14.5	-	11.2	14.4	12.5	6.3	24.2
Psychology	3.6	3.8	3.2	3.6	4.0	3.9	-	4.6	-	3.8	4.1	3.9	2.2	1.7
Social sciences	8.1	8.8	7.8	9.7	9.4	6.6	-	11.0	-	8.8	7.2	6.0	9.9	1.9
Professional fields	9.1	9.6	13.3	16.6	4.4	5.4	-	1.3	-	5.9	5.9	2.2	6.5	1.0
Other	11.3	7.3	9.1	8.7	10.2	6.3	-	4.0	-	6.6	17.4	10.8	7.5	7.4
Subtotals:														
Liberal arts	47.3	51.6	40.8	45.1	54.7	50.9	-	66.5	-	59.0	54.7	54.2	31.9	19.3
Sciences	20.4	17.3	21.6	17.5	18.7	16.6	-	19.5	-	15.9	21.3	14.1	6.7	30.5
Career-related fields	32.3	31.1	37.6	37.4	26.6	32.5	-	14.0	-	25.1	24.0	31.6	61.4	50.2
Vocational Emphasis														
% agreeing, very important or essential for instit. to:														
prepare students for later employment	78.9	64.8	72.3	62.4	79.9	73.6	-	41.2	-	69.9	89.2	75.3	97.0	91.8
provide skilled human resources for the local community	68.1	53.3	59.1	54.5	65.8	60.2	-	32.2	-	55.2	86.6	65.5	75.0	52.9
Research Orientation														
% agreeing, very important or essential for instit. to develop in students the ability to pursue research	32.6	40.6	44.2	52.9	28.4	35.5	-	43.6	-	28.4	15.3	28.6	31.9	23.5

TABLE A-6

(Continued)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
% with federal research funds, as principal investigator	12.8	11.6	22.7	22.1	4.9	3.8	-	5.3	-	3.1	1.9	1.6	1.6	7.5
% with federal research funds, other capacity	6.5	6.6	10.2	11.1	4.3	2.4	-	4.4	-	3.6	1.9	1.4	1.8	6.0
% with institutional or departmental research funds, as principal investigator	12.4	9.7	18.9	13.0	8.3	6.2	-	13.6	-	4.4	2.9	6.8	16.6	11.6
% with institutional or departmental research funds, other capacity	2.5	2.3	3.7	3.4	2.1	1.6	-	2.2	-	0.9	0.6	1.2	0.9	3.2
Introductory and Graduate Offerings														
% teaching introductory courses	91.7	91.9	85.1	84.4	92.1	94.8	-	95.6	-	95.9	99.2	97.8	87.6	89.6
% teaching graduate courses	77.7	72.3	89.9	89.4	76.7	67.5	-	31.1	-	30.4	9.7	10.0	81.9	41.2
Opportunities for Leadership Experience														
% of seniors who said they:														
held student office	11.8	22.4	13.8	16.6	13.8	19.9	-	25.1	-	25.7	8.2	20.6	17.2	24.2
served on a student-faculty committee	8.9	16.5	11.1	14.5	10.9	15.8	-	21.2	-	19.0	5.1	11.2	10.6	10.8
worked on a school paper	6.2	12.6	5.4	9.0	7.8	12.0	-	14.4	-	15.0	5.6	10.7	5.5	10.9
worked in a school political campaign	11.4	16.4	13.7	20.7	11.7	14.1	-	23.2	-	15.9	9.3	10.8	8.0	9.0
joined a fraternity, sorority or other club	30.0	39.2	35.7	42.2	36.5	49.6	-	28.3	-	40.6	19.8	28.3	29.8	47.8

TABLE A-6

(Concluded)

	ALL INSTITUTIONS		DOCTORAL		COMPREHENSIVE		LIBERAL ARTS I		LIBERAL ARTS II		TWO-YEAR		SPECIALIZED	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Faculty Attitudes														
% agreeing, students should have representation on instit. governing boards	65.6	67.4	62.9	64.2	70.1	65.5	-	65.4	-	76.7	67.4	63.4	59.1	57.7
% agreeing, student evaluations should be a factor in faculty promotions	71.7	70.5	70.0	66.7	74.0	73.7	-	76.7	-	74.8	72.2	59.0	71.7	65.0
Student-Faculty Contact														
% teaching three or more different classes	64.2	60.1	46.7	45.0	75.0	69.9	-	79.8	-	73.2	85.5	87.7	76.1	59.8
% with student teaching assistants	29.5	24.2	42.5	32.9	24.2	18.1	-	23.5	-	17.8	11.0	4.5	10.0	12.5
% with student research assistants	20.8	17.1	34.2	28.7	11.9	9.4	-	12.7	-	7.0	2.1	2.4	28.9	11.0
% with 5 or more hours/week in academic advising	48.7	48.5	50.1	47.6	51.1	49.8	-	50.9	-	49.9	46.8	40.0	26.1	43.4
% who encourage students to see them outside of class	77.8	78.5	73.2	70.2	80.7	85.2	-	85.2	-	84.0	81.9	80.4	94.3	87.2
% who spend 2 or more hours per week in social activities with students	27.1	34.2	26.6	26.0	29.6	38.6	-	41.1	-	43.4	23.8	35.5	34.8	24.0
Emphasis on Student Development														
% agreeing, very important or essential for instit. to:														
provide for student's emotional development	31.8	44.5	24.4	28.2	32.2	46.9	-	48.3	-	61.5	45.0	65.2	28.3	31.2
foster deeper levels of student self-understanding	41.5	54.2	36.2	40.1	41.4	57.6	-	62.2	-	67.5	53.0	66.1	21.5	36.4
develop moral character	32.5	51.7	26.6	33.5	30.9	55.5	-	53.8	-	69.7	42.4	77.9	50.8	48.0
develop responsible citizens	63.6	65.6	56.3	53.9	61.9	67.5	-	66.6	-	78.5	77.4	80.8	70.8	57.8
Evaluations of College														
% of seniors who were:														
very satisfied with college	24.2	30.1	28.6	29.5	21.7	29.1	-	37.6	-	27.7	21.9	27.2	36.5	37.1
dissatisfied with college	12.0	11.4	11.5	11.2	12.0	10.9	-	9.4	-	11.6	12.3	13.9	11.0	10.5

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